Erler & Kalinowski, Inc.

Consulting Engineers and Scientists

3250 Ocean Park Blvd., Suite 385 Santa Monica, CA 90405 www.ekiconsult.com

Tel. (310) 314-8855 Fax (310) 314-8860

2001 FEB -71 A D 28

5 February 2001

CALIFORNIA RECIONAL WATER QUALITY CONTROL BOATS LOS ANGELES REGION

Mr. Steven Hariri
Site Cleanup Unit
California Regional Water Quality Control Board
Los Angeles Region
320 4th Street, Suite 200
Los Angeles, CA 90013

Subject:

Quarterly Progress Report for October through December 2000 and Request for No Further Action Regarding Soil for the Jervis B. Webb Company of California Property, 5030 Firestone Boulevard, South Gate, California (RWQCB SLIC File No. 744; EKI 991103.01)

Dear Mr. Hariri:

On behalf of Jervis B. Webb Company of California ("Webb"), Erler & Kalinowski, Inc. ("EKI") is pleased to present the enclosed *Quarterly Progress Report for October through December 2000*, dated 5 February 2001. This report describes the groundwater monitoring and soil remediation activities completed during the period from October through December 2000 at the Webb property located at 5030 Firestone Boulevard in South Gate, California ("Site").

As discussed in the enclosed report, Webb requests that the California Regional Water Quality Control Board, Los Angeles Region ("RWQCB") issue a no further action letter for soil at the Site. During the period from November 1996 through December 2000, Webb completed the following considerable soil characterization and remediation activities at the Site and the adjacent property located at 9301 Rayo Avenue (formerly owned by Webb and currently owned by Reliable Steel Building Products, Inc.):

• A below-grade concrete containment structure and an open-bottomed sump identified in the building on the Rayo Avenue property were excavated and removed during November 1996. Chemical analyses of samples of soil collected from the excavations beneath the removed structures did not detect elevated concentrations of petroleum hydrocarbon compounds, volatile organic compounds ("VOCs"), or metals. A closure letter for removal of the two structures was received from the County of Los Angeles Department of Public Works. As requested by Webb, EKI contacted the U.S. Environmental Protection Agency ("USEPA") and provided information regarding the tank closures and related investigations. The USEPA concluded that no further investigation was needed on the Rayo Avenue property but further investigation of the Firestone Boulevard property was required before the Site could

Letter to Mr. Steven Hariri Regional Water Quality Control Board 5 February 2001 Page 2

be removed from the active CERCLIS list. Subsequently, the Rayo Avenue property was sold to Reliable Steel and Webb initiated investigations at the Firestone Boulevard property. To the best of Webb's knowledge, Webb used the Firestone Boulevard property only for storage of materials and the chemical impacts to soil and groundwater at that property were caused by the former owner, the Blake Rivet Company.

- During October and December 1997, a Phase II soil investigation consisting of soil sampling at 19 locations and a soil gas sampling at 37 locations was completed at the Firestone Boulevard property. The soil borings were completed at maximum depths ranging from approximately 10 to 63 feet below ground surface ("ft bgs") and samples of soil gas were collected at 5 ft bgs. Samples of soil were analyzed for pH, petroleum hydrocarbon compounds, trace metals, and VOCs. Soil pH, petroleum hydrocarbons, and trace metals were not detected at concentrations of concern. Tetrachloroethene ("PCE") and trichloroethene ("TCE") were detected in most of the soil samples that were analyzed. The highest concentrations of PCE and TCE were detected in a sample of soil collected from approximately 20 ft bgs beneath the clarifier near the southeast corner of the building on the Firestone Boulevard property. No other VOCs were detected in samples of soil collected at the Site. TCE and PCE were the primary chemicals of concern detected in the samples of soil gas collected at the Site; chloroform, 1,1,1-trichloroethane, dichlorodifluoromethane, and trichlorofluoromethane also were detected at low concentrations. Based on the results of these investigations, Webb requested that the RWQCB assume lead regulatory oversight of investigations and potential remedial actions at the Site.
- A work plan, dated 14 April 1999, for removal of the clarifier at the Firestone Boulevard property and installation of a soil vapor extraction ("SVE") system to remove VOCs from vadose zone soil at the Site was presented to the RWQCB. In a letter dated 18 May 1999, the RWQCB approved the work plan.
- Removal of the clarifier on the Firestone Boulevard property was completed in June 1999. The excavated area was filled with 47 cubic yards of imported sand. The excavated soil was disposed offsite during October 1999. Also in June 1999, eight soil vapor wells were installed at the Site in accordance with the work plan approved by the RWQCB.
- Soil vapor extraction began at the Site on 16 March 2000. The results of the soil vapor extraction have been documented in three progress reports prepared for the RWQCB, including the enclosed report. Excluding planned shutdowns of the system for static vapor sampling, the SVE system at the Site operated approximately 84 percent of the time between system start-up on 16 March 2000 and the shutdown for static vapor sampling on 14 December 2000. Although several chemicals have been detected, the primary VOCs detected in samples of soil vapor collected from the SVE system were TCE and PCE. It has been estimated that approximately 133 pounds of

Letter to Mr. Steven Hariri Regional Water Quality Control Board 5 February 2001 Page 3

VOCs, including 108 pounds of TCE, have been extracted from the soil at the Site as of 14 December 2000.

• The data presented in the enclosed progress report indicate that substantial remediation of vadose zone soil has occurred during nine months of operation of the SVE system at the Site, and that the concentrations of VOCs in soil gas beneath the Site have stabilized at low levels relative to the concentrations measured at the time of system startup. The rate of VOC mass removal by the SVE system at the Site also has decreased to a low, stable value that does not warrant additional soil vapor extraction at the Site.

The data presented in the enclosed progress report indicate the SVE system at the Site has achieved appropriate conditions for closure of soil remediation activities at the Site. At this time, Webb requests that the RWQCB issue a no further action letter for soil at the Site. The SVE system has been shut down pending review of this progress report and Webb's request by the RWQCB. Activities related to groundwater monitoring at the Site will continue as indicated in the progress report.

Please contact us if you have any comments or questions.

Very truly yours,

ERLER & KALINOWSKI, INC.

Steven R. Chambers, Ph.D.

Project Manager

cc:

Steven G. Miller, P.E. Supervising Engineer

Mr. Michael Farley, Esq., Jervis B. Webb Company

Quarterly Progress Report October through December 2000

Jervis B. Webb Company of California 5030 Firestone Boulevard South Gate, California

5 February 2001

Erler & Kalinowski, Inc.

Consulting Engineers and Scientists 3250 Ocean Park Blvd., Suite 385 Santa Monica, California 90405 (310) 314-8855 Fax: (310) 314-8860

Quarterly Progress Report: October through December 2000 Jervis B. Webb Company of California 5030 Firestone Boulevard, South Gate, California

Table of Contents

1.	INTR	ODUCTION1	Ĺ
2.	QUA	RTERLY GROUNDWATER MONITORING2	2
	2.1. M	easurements of Groundwater Elevation2	2
	2.2. Gi	roundwater Sampling2)
	2.2.1.	Groundwater Sampling Procedures)
	2.2.2.	Analytical Results for Groundwater Samples	ţ
	2.2.3.	Quality Assurance/Quality Control	ì
3.	SOIL	REMEDIATION5	í
	3.1. De	escription of the Soil Vapor Extraction System5	í
	3.1.1.	Soil Vapor Wells5	ŀ
	3.1.2.	Soil Vapor Extraction and Treatment System	,
	3.2. O	peration and Monitoring of the SVE System6	,
	3.3. So	il Vapor Sampling7	,
	3.3.1.	Vapor Well and System Influent Sampling	
	3.3.2.	Estimated VOC Removal Rates	
	3.3.3.	Soil Vapor Field Monitoring	
	3.3.4.	SCAQMD Compliance Monitoring	
	3.4. Sta	atic Vapor Sampling11	
	3.5. Re	equest for No Further Action for Soil at the Site	
4.	PLAN	NED ACTIVITIES FOR NEXT QUARTER15	
5.	SUMN	MARY16	
6.	REFE	RENCES AND PREVIOUS REPORTS18	

Quarterly Progress Report: October through December 2000 Jervis B. Webb Company of California 5030 Firestone Boulevard, South Gate, California

Table of Contents

LIST OF TABLES

1	Groundwater Elevations in Monitoring Wells
2	Analytical Results for Groundwater Samples
3a	Soil Vapor Extraction Data: Blower Influent
3b	Soil Vapor Extraction Data: SVE-1
3c	Soil Vapor Extraction Data: SVE-2
3d	Soil Vapor Extraction Data: SVE-3
3e	Soil Vapor Extraction Data: SVE-D1
3f	Soil Vapor Extraction Data: VMP-D1
3g	Soil Vapor Extraction Data: VMP-D2
4	Field Data for Soil Vapor Monitoring Probes
5	Soil Vapor Laboratory Analytical Data

LIST OF FIGURES

1	Site Location Map
2	Groundwater Monitoring Well Locations
3	Elevation of the Groundwater Table on 26 October 2000
4	Elevation of the Groundwater Table on 21 November 2000
5	Elevation of the Groundwater Table on 5 December 2000
6	Concentrations of TCE in Groundwater
7	Concentrations of cis-1,2-DCE in Groundwater
8	Layout of the Soil Vapor Extraction System
9	Soil Vapor Extraction System Schematic
10a	Concentrations of Total VOCs versus Time: Blower Influent
10b	Concentrations of Total VOCs versus Time: SVE-1
10c	Concentrations of Total VOCs versus Time: SVE-2
10d	Concentrations of Total VOCs versus Time: SVE-3
10e	Concentrations of Total VOCs versus Time: SVE-D1
10f	Concentrations of Total VOCs versus Time: VMP-D1
10g	Concentrations of Total VOCs versus Time: VMP-D2
11	Cumulative VOC Removal

Quarterly Progress Report: October through December 2000 Jervis B. Webb Company of California 5030 Firestone Boulevard, South Gate, California

Table of Contents

LIST OF APPENDICES

- A Groundwater Purge and Water Quality Monitoring Forms for Groundwater Sampling
- B Laboratory Reports and Chain-of-Custody Forms for Groundwater Sampling
- C Laboratory Reports and Chain-of-Custody Forms for Soil Vapor Sampling

1. INTRODUCTION

Erler & Kalinowski, Inc. ("EKI") is pleased to present this *Quarterly Progress Report*, *October through December 2000* for the property located at 5030 Firestone Boulevard and 9301 Rayo Avenue in South Gate, California (collectively referred to as the "Site," see Figure 1). The work documented in this report was performed on behalf of the Jervis B. Webb Company of California ("Webb"). The property at 5030 Firestone Boulevard is owned by Webb and the adjacent property at 9301 Rayo Avenue is owned by Reliable Steel Building Products, Inc. ("Reliable Steel").

The principal objectives of the activities performed during this quarter were to (1) monitor the groundwater wells at the Site, and (2) continue operation of the soil vapor extraction ("SVE") system at the Site. The quarterly groundwater monitoring activities described herein were performed in accordance with the procedures described in *Project Tasks*, *Schedule*, and *Work Plan for Additional Groundwater Investigation and Quarterly Groundwater Monitoring at the Jervis B. Webb Company Property* by EKI, dated 29 September 1998. The SVE activities described herein were performed in accordance with the *Work Plan for Clarifier Removal and Soil Remediation by Soil Vapor Extraction* by EKI, dated 14 April 1999 ("SVE Work Plan"). The California Regional Water Quality Control Board, Los Angeles Region ("RWQCB") approved the SVE Work Plan, with two modifications, in its letter to Webb dated 18 May 1999.

The data presented in this progress report indicate the SVE system at the Site has achieved appropriate conditions for closure of soil remediation activities at the Site. At this time, Webb requests that the RWQCB issue a no further action letter for soil at the Site. The SVE system has been shut down pending review of this progress report and Webb's request by the RWQCB.

2. QUARTERLY GROUNDWATER MONITORING

2.1. Measurements of Groundwater Elevation

The depth to groundwater in each of the five groundwater monitoring wells at the Site was measured on 26 October, 21 November, and 5 December 2000 (see Figure 2 for well locations). These data are provided in Table 1. The depth to the groundwater table beneath the Site is approximately 45 feet below ground surface ("ft bgs"). Contours representing the elevation of the groundwater table on 26 October, 21 November, and 5 December 2000 are shown on Figures 3, 4, and 5, respectively. As inferred from the contours shown on these figures, the primary direction of groundwater flow in the groundwater table aquifer beneath the Site appears to be toward the south-southeast.

2.2. Groundwater Sampling

Samples of groundwater were collected from each of the five groundwater monitoring wells at the Site on 5 December 2000. In addition, a duplicate sample of groundwater was collected from well MW-3. All samples of groundwater were submitted to Orange Coast Analytical, Inc. in Tustin, California, for analyses of volatile organic compounds ("VOCs") using United States Environmental Protection Agency ("EPA") Method 8260B. The analytical results for groundwater samples collected during this monitoring event are summarized in Table 2.

2.2.1. Groundwater Sampling Procedures

Prior to sampling of groundwater, each well was purged of a minimum of three well-casing volumes of groundwater using a submersible, electric pump. Groundwater purging was performed by West Hazmat Drilling Corp. ("West Hazmat") and groundwater samples were collected by EKI. All down-hole equipment was thoroughly steam cleaned before use at each well.

During purging of the monitoring wells on 5 December 2000, the temperature, pH, conductivity, and turbidity of the purged groundwater were recorded by EKI. The instruments used for monitoring the purged groundwater were calibrated prior to commencement of groundwater purging. For each groundwater monitoring well, the time, water quality parameters, and volume of purged groundwater were recorded on forms in the field (see Appendix A). Purging at each well continued until the variability of the monitored groundwater quality parameters stabilized to within approximately ten percent. Groundwater quality parameters were generally stable after purging three casing volumes of water from each well. The final turbidity of the purged groundwater was generally low, i.e., between 0.71 and 4.33 nephelometric turbidity units (see Appendix A).

2000-Q4 Report.doc EKI 991103.01 2

02/05/2001

A groundwater sample was collected from each monitoring well using a disposable polyethylene bailer. A new bailer was used to collect the sample from each well. A sample label that included a unique sample identification number, the time, and the date when the sample was collected was attached to each sample container. Sample containers were sealed in zip-lock plastic bags and placed in a cooler with ice for temporary storage and transport to the analytical laboratory. Chain-of-Custody forms were initiated in the field and stored with the samples. Laboratory reports and Chain-of-Custody forms for groundwater samples are attached in Appendix B.

2.2.2. Analytical Results for Groundwater Samples

Trichloroethene ("TCE"), cis-1,2-dichloroethene ("c-1,2-DCE"), and 1,1-dichloroethane ("1,1-DCA") were the only VOCs detected in the samples of groundwater collected at the Site on 5 December 2000 (see Table 2). The concentrations of TCE and c-1,2-DCE detected in the samples of groundwater collected at the Site are shown on Figures 6 and 7, respectively. The only detection of 1,1-DCA, at a concentration of 20 micrograms per liter ("ug/L"), was in the duplicate sample of groundwater collected from well MW-3. Consistent with previous results, TCE was the chemical of concern detected with the greatest frequency (five of six samples) and at the highest concentration (30,000 ug/L in well MW-1). The concentrations of TCE, c-1,2-DCE, and 1,1-DCA detected in samples of the groundwater collected at the Site during December 2000 were within the ranges of concentrations detected during previous monitoring at the Site (see Table 2).

2.2.3. Quality Assurance/Quality Control

Standard laboratory QA/QC procedures used for the project included analyses of matrix spikes, matrix spike duplicates, a quality control check spike sample, and a method blank. The percent recoveries of the matrix spike, matrix spike duplicate, and the quality control check spike sample were within acceptable ranges. No analytes were detected in the method blank samples analyzed for this project. QA/QC results are provided with the laboratory reports in Appendix B.

A duplicate groundwater sample was collected from monitoring well MW-3 (see Table 2). Two analytes (TCE and c-1,2-DCE) were detected in both of the samples of groundwater collected from well MW-3. The relative percentage differences ("RPDs") for TCE and c-1,2-DCE ranged between 4.1 and 4.9 percent. These RPDs indicate an acceptable range of sampling and analytical reproducibility. One analyte (1,1-DCA) was detected in the duplicate sample at a concentration of 20 ug/l, but was not present above the detection limit of 10 ug/l in the primary sample. As 1,1-DCA has historically been present in groundwater samples collected from well MW-3 at low concentrations (i.e. less than 20 ug/l), this discrepancy does not appear problematic.

EKI also collected an equipment rinsate blank during groundwater sampling activities on 5 December 2000. No chemicals were detected above method detection limits in the rinsate blank sample.

3. SOIL REMEDIATION

3.1. Description of the Soil Vapor Extraction System

3.1.1. Soil Vapor Wells

Four soil vapor extraction wells and four soil vapor monitoring probes were installed at the Site during June 1999 (see Figure 8). The wells and probes were designed to allow for vapor extraction and monitoring in both the shallow and deep vadose zones at the Site. All of the wells were constructed using Schedule 40 PVC casing and screen. More detailed descriptions of well construction and subsurface conditions at the Site are contained in reports previously provided to the RWQCB (see EKI, 14 April 1999; EKI, 13 October 1999).

On 29 June 2000, two of the soil vapor monitoring probes (VMP-D1 and VMP-D2) were converted to extraction wells by connecting the probes to the soil vapor extraction system at the Site with two-inch diameter PVC pipe. These wells have been used as extraction wells since 6 July 2000.

<u>Soil Vapor Extraction Wells</u>: The three shallow vadose zone SVE wells (see locations SVE-1, SVE-2, and SVE-3 on Figure 8) are constructed with two-inch diameter PVC casing. Wells SVE-1 and SVE-3 have slotted screen from approximately 19 to 25 ft bgs, and have total depths of approximately 25 ft bgs. Well SVE-2 has slotted screen from approximately 18 to 24 ft bgs, and has a total depth of approximately 24 ft bgs.

The three deep vadose zone SVE wells are wells SVE-D1, VMP-D1, and VMP-D2. Well SVE-D1 is constructed with four-inch diameter PVC casing with slotted screen from approximately 30 to 40 ft bgs, and has a total depth of approximately 44 ft bgs. Deep vadose zone SVE wells VMP-D1 and VMP-D2 are constructed in the same boreholes with shallow vadose zone SVE wells SVE-2 and SVE-3, respectively, and are constructed with 2-inch diameter PVC casing. Well VMP-D1 has slotted screen from approximately 30 to 40 ft bgs, and has a total depth of approximately 43 ft bgs. Well VMP-D2 has slotted screen from approximately 31 to 41 ft bgs, and has a total depth of approximately 44 ft bgs.

<u>Soil Vapor Monitoring Probes</u>: The shallow vadose zone vapor monitoring probes (see locations VMP-1 and VMP-2 on Figure 8) are constructed with two-inch diameter PVC casing with slotted screen from approximately 19 to 25 ft bgs, and have total depths of approximately 25 ft bgs.

3.1.2. Soil Vapor Extraction and Treatment System

Installation of the SVE system was completed at the Site during March 2000 (see Figure 8). Soil vapors from the extraction wells are passed through a condensate knock-out vessel and through a 200 cubic feet per minute ("cfm") blower (see Figure 9). The soil vapors are then passed through a heat exchanger and two 1,000-pound granular activated carbon ("GAC") vessels in series, with the treated vapors exhausted to the atmosphere under permit of the South Coast Air Quality Management District ("SCAQMD"). Valves on piping from each well and an ambient air inlet valve located ahead of the knockout vessel allow regulation of air extracted from the wells. PVC pipe and fittings are used throughout the system. Electrical power to the system is metered, and the system is enclosed in a fenced area.

Vacuum gauges, a hand-held flow meter, and sampling ports are used to monitor each of the vapor extraction wells. Vacuum is measured in inches of water column ("in-wc"), vapor flow rate is measured in actual cubic feet per minute ("acfm"), and concentrations of VOCs are measured in parts per million by volume ("ppmv"). Sampling ports were installed at each of the vapor wells and probes and several locations in the SVE system for monitoring of VOC concentrations.

3.2. Operation and Monitoring of the SVE System

The SVE system began operating on 16 March 2000. During this reporting period (i.e., October through December 2000), wells SVE-1, SVE-2, SVE-3, SVE-D1, VMP-D1, and VMP-D2 were used as vapor extraction wells. Operation and maintenance of the SVE system is performed by Drewelow Engineering of Cardiff, California.

The SVE system was shut down seven times during this reporting period, as described below:

- 1. The system shut down on 1 October 2000 due to excess dirt and water in the SVE system. The system was restarted on 5 October 2000.
- 2. The system shut down on 31 October 2000 due to excess dirt and water in the SVE system. The system was restarted on 2 November 2000.
- 3. The system shut down on 2 November 2000 due to excess water in the SVE system. Several maintenance issues were addressed by Drewelow Engineering, and the system was restarted on 9 November 2000.
- 4. The system shut down on 9 November 2000 due to electrical supply problems. The system was restarted on 16 November 2000.
- 5. The system shut down on 17 November 2000 due to electrical supply problems. The system was restarted on 23 November 2000.
- 6. The system shut down on 6 December 2000 due to excess water in the SVE system. The system was restarted on 7 December 2000.

7. The system was shut down from 14 December 2000 through 4 January 2001 as part of the planned static vapor sampling (see Section 3.4).

Excluding planned shutdowns of the system for static vapor sampling, the SVE system at the Site operated approximately 84 percent of the time between system start-up on 16 March 2000 and the shutdown for static vapor sampling on 14 December 2000.

The following parameters have been monitored during operation of the SVE system: vapor flow rate from the extraction wells; total vapor flow rate; vacuum (pressure) at the extraction wells and monitoring points; blower influent flow rate and vacuum; blower discharge flow rate, pressure, and temperature; and VOC concentrations in the extracted soil vapor. The water level in the knockout tank is also monitored. No water had been observed in the knockout tank prior to a system shutdown on 21 June 2000. However, during this reporting period, water was observed in the piping of each of the extraction wells and in the inlet manifold to the system blower. Approximately 120 gallons of water were removed from the SVE system during this reporting period. The water is stored in 55-gallon drums and transported offsite for disposal and/or treatment.

Monitoring data collected at the inlet to the system blower prior to dilution with ambient air are presented in Table 3a and Figure 10a. Monitoring data collected at individual soil vapor extraction wells are presented in Tables 3b through 3g and Figures 10b through 10g. Field monitoring data for the soil vapor monitoring probes are presented in Table 4.

Due to restrictions of the SCAQMD permit regarding the VOC concentration in the influent to the first GAC vessel, the system was initially operated at partial vapor extraction capacity with ambient air diluting the influent concentrations. VOC concentrations subsequently declined to levels within SCAQMD permit requirements during April 2000. This allowed all extraction wells to be operated at full vapor extraction capacity based upon a vacuum of approximately 140 in-wc during this reporting period. However, the total volume of soil vapor extracted from the six extraction wells was not great enough to allow for operation of the SVE system without the use of some dilution or recirculation air.

At the time of the shutdown on 14 December 2000, flow rates in the three shallow zone extraction wells (SVE-1, SVE-2, and SVE-3) ranged from 2.3 to 2.9 acfm. The flow rates in the three deep zone extraction wells (SVE-D1, VMP-D1, and VMP-D2) ranged from 15 to 18 acfm at the time of shutdown.

3.3. Soil Vapor Sampling

3.3.1. Vapor Well and System Influent Sampling

On 14 December 2000, and 4 January 2001, EKI collected soil vapor samples for laboratory analysis from the undiluted blower influent (i.e., the combined total influent of the SVE wells) and from each of the eight SVE wells and soil vapor monitoring probes at the Site. On

26 October 2000, EKI collected soil vapor samples from the undiluted blower influent and wells SVE-1 and SVE-D1. Duplicate soil vapor samples were collected from well SVE-D1 on 14 December 2000 and 4 January 2001. The samples of soil vapor collected on 4 January 2001 were collected under static conditions, whereas vapor extraction was occurring during the sampling events of 26 October and 14 December 2000. The samples were collected in five-liter Tedlar bags using a purge/sampling pump connected to a sampling port with Teflon tubing. All samples were labeled with a unique sample identification number, and chain-of-custody forms were initiated at the time of sampling. All samples were analyzed for VOCs by Performance Analytical, Inc., of Simi Valley, California, using EPA Method TO-14A. Analytical results for the samples are summarized in Table 5, and copies of the laboratory reports and chain-of-custody forms are provided in Appendix C.

The analytical results for samples of soil vapor collected during system operation are described below. The analytical results for the static vapor sampling event on 4 January 2001 are described in Section 3.4.

Shallow Vadose Zone: During this reporting period, several VOCs were detected at concentrations above method detection limits in soil vapor samples collected from SVE wells SVE-1, SVE-2, and SVE-3 and soil vapor monitoring probes VMP-1 and VMP-2. However, the only VOCs detected at concentrations above method detection limits and 1 ppmv were TCE, tetrachloroethene ("PCE"), and toluene (Table 5). Concentrations of VOCs detected in soil vapor samples collected from extraction well SVE-1 were higher than in the samples collected from the other shallow vadose zone SVE wells and monitoring probes. Between startup of the SVE system on 16 March 2000 and the system shutdown on 14 December 2000, the total concentration of VOCs detected in samples of soil vapor collected from well SVE-1 decreased from 10,000 ppmv to 280 ppmv (i.e., a decrease of about 97 percent). During the most recent three monitoring events with the system operating, the concentrations of TCE, PCE, and toluene detected in samples of soil vapor collected from well SVE-1 were relatively low (maximum concentrations of 300 ppmv, 9.1 ppmv, and 6.7 ppmv, respectively) and did not vary significantly (see Table 5). The concentrations of VOCs detected in samples of soil vapor collected from SVE wells SVE-2 and SVE-3 and soil vapor monitoring probes VMP-1 and VMP-2 have also decreased significantly during the course of the system operation. The total concentrations of VOCs detected in soil vapor samples collected from extraction wells SVE-1, SVE-2, and SVE-3 during operation of the SVE system are illustrated on Figures 10b, 10c, and 10d, respectively.

<u>Deep Vadose Zone</u>: During this reporting period, several VOCs were detected at concentrations above method detection limits in samples of soil vapor collected from extraction wells SVE-D1, VMP-D1, and VMP-D2. However, the only VOCs detected at concentrations above 1 ppmv were TCE, benzene, PCE, toluene, and xylenes. The concentrations of VOCs detected in samples of soil vapor collected from well SVE-D1 were generally higher than in samples collected from the other deep vadose zone wells. Between startup of the SVE system on 16 March 2000 and the system shutdown on 14 December 2000, the total concentration of VOCs detected in samples of soil vapor collected from well

SVE-D1 decreased from 1,000 to 6.0 ppmv (i.e., a decrease of 99 percent). During the most recent three monitoring events with the system operating, the concentrations of TCE, benzene, PCE, toluene, and xylenes detected in samples of soil vapor collected from well SVE-D1 were low (maximum concentrations of 4.0 ppmv, 40 ppmv, 0.16 ppmv, 3.7, and 4.4 ppmv, respectively) and have gradually decreased (see Table 5). The concentrations of VOCs detected in samples of soil vapor collected from VMP-D1 and VMP-D2 have also decreased significantly during the course of the system operation. The total concentrations of VOCs detected in soil vapor samples collected from extraction wells SVE-D1, VMP-D1, and VMP-D2 during operation of the SVE system are illustrated on Figures 10e, 10f, and 10g, respectively.

SVE Blower Influent: During this reporting period, several VOCs were detected at concentrations above method detection limits in soil vapor samples collected from influent to the system blower. However, the only VOCs detected at concentrations above 1 ppmv were TCE, benzene, and PCE (Table 5). Between startup of the SVE system on 16 March 2000 and the system shutdown on 14 December 2000, the total concentration of VOCs detected in samples of blower influent decreased from 940 ppmv to 14 ppmv (i.e., a decrease of about 98 percent). During the most recent three monitoring events with the system operating, the concentrations of TCE, benzene, and PCE detected in samples of blower influent were relatively low (maximum concentrations of 6.7 ppmv, 10 ppmv, and 1.4 ppmv, respectively) and did not vary significantly (see Table 5). The total concentration of VOCs detected in soil vapor samples collected from the blower influent during operation of the SVE system is illustrated on Figure 10a.

Quality Assurance/Quality Control ("QA/QC"): Standard laboratory QA/QC procedures used for the project included analyses of laboratory duplicates and method blanks. The relative percentage differences ("RPDs") of the laboratory duplicates were within acceptable ranges. No analytes were detected in the method blank samples analyzed for this project. Laboratory QA/QC results are provided with the laboratory reports in Appendix C.

Duplicate soil vapor samples were collected from deep vadose zone well SVE-D1 on 14 December 2000 and 5 January 2001 (see Table 5). The RPDs for TCE were 0 and 9.3 percent, respectively. These RPDs indicate an acceptable range of sampling and analytical reproducibility.

EKI collected equipment blanks during sampling activities on 14 December 2000 and 5 January 2001. The equipment blanks were collected by pumping ambient air into a tedlar bag using the purge/sampling pump, as described above. Concentrations of TCE detected in the equipment blanks ranged from 0.0011 to 0.0085 ppmv. The concentrations of TCE detected in vapor samples collected from the vapor wells, vapor probes, and blower influent were at least 15 times greater than the concentrations of TCE detected in the equipment blank samples.

3.3.2. Estimated VOC Removal Rates

Rates of VOC removal were estimated using measured vacuum readings, flow rates, and analytical data (see Tables 3a through 3g). In most cases, mass removal for a given period of time was calculated using an average of the mass removal rates at the beginning and end of the time period. Exceptions to this averaging method are noted in the tables.

Based on measurements made at the blower influent, it is estimated that 133 pounds of VOCs, including 108 pounds of TCE, have been extracted from soil at the Site as of 14 December 2000 (see Table 3a and Figure 11). Using measurements made at individual extraction wells, it is estimated that 282 pounds of VOCs, including 250 pounds of TCE, have been extracted by the SVE system at the Site (see Tables 3b through 3g). The sum of the mass removal calculated for each of the extraction wells is higher than the estimated mass removal as measured at the blower influent. This discrepancy is believed to be caused in part by low precision in measuring the relatively low flow rates in the shallow zone extraction wells and is magnified by the relatively high TCE concentrations detected in well SVE-1. The estimates from data for the blower influent are considered to be the more reliable estimates of total VOC mass removal.

Based on measurements made at the blower influent, it is estimated that 9 pounds of VOCs, including 4 pounds of TCE, were extracted from soil at the Site during this reporting period. Therefore, only about 7 percent of the cumulative mass removal by the SVE system occurred during the last three months of system operation. The average mass removal rate during this reporting period was approximately 80 percent lower than the mass removal rate during the previous reporting period. However, the daily mass removal rates by the SVE system do not appear to have changed significantly during the last three months of system operation (see Table 3a). Thus, a relatively small, steady removal of VOCs occurred during this reporting period. Approximately 57 percent of this mass removal occurred in the shallow vadose zone.

3.3.3. Soil Vapor Field Monitoring

Total VOC concentrations in soil vapor samples were also periodically monitored with an organic vapor meter, which utilizes a photoionization detector ("PID") to measure total concentrations of VOCs. The PID does not distinguish between individual compounds, but gives a reading for total VOCs. Samples for PID analyses were collected in Tedlar bags using the method described in Section 3.3.1. The PID was calibrated with 100 ppmv of isobutylene. PID readings from soil vapor samples collected at the extraction wells and vapor monitoring probes are presented in Tables 3a through 3g and in Table 4. These data are plotted as a function of time on Figures 10a through 10g. The PID readings suggest that total VOC concentrations in the blower influent and each of the vapor wells decreased during this reporting period.

10

3.3.4. SCAQMD Compliance Monitoring

During this reporting period, the effluent of the treatment system was monitored with a PID on a weekly basis to demonstrate conformance with the limitations of the SCAQMD permit for the system. For treatment system monitoring, the PID was calibrated with 50 ppmv of hexane.

The vapor treatment components of the SVE system at the Site are owned by Drewelow Engineering, and the SCAQMD permit is held by Drewelow. Drewelow reports that effluent concentrations measured by the PID have been within the discharge limitations of the SCAQMD permit throughout the operation of the SVE system.

3.4. Static Vapor Sampling

As discussed in Section 3.2, the soil vapor extraction system at the Site was shut down once during this reporting period to allow collection of soil vapor samples from the extraction wells and monitoring probes under static conditions. Chemical analyses of the samples of soil vapor collected under static conditions are used to assess the progress and effectiveness of soil remediation at the Site. The SVE system was shut down on 14 December 2000 for a period of three weeks to allow collection of soil vapor samples. A summary of the TCE concentrations detected in static soil vapor samples collected from each well is presented below (see Table 5 and Figures 10b through 10g).

SVE-1: The concentrations of TCE detected in static vapor samples collected from well SVE-1 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, and 4 January 2001 were 10,000, 3,300, 230, and 350 ppmv, respectively. These data indicate that the concentration of TCE has decreased 97 percent after nine months of system operation, and that the concentration of TCE did not change significantly at this location during the last three months of system operation.

SVE-2: The concentrations of TCE detected in static vapor samples collected from well SVE-2 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, and 4 January 2001 were 75, 120, 110, and 34 ppmv, respectively. These concentrations indicate a 55 to 72 percent decrease in TCE concentration after nine months of system operation. Although the laboratory data are inconsistent, mass removal estimates and field monitoring of total VOC concentrations with a hand-held PID suggest that most of the soil remediation at this location occurred during the first six months of system operation (see Table 3c and Figure 10c).

<u>SVE-3</u>: The concentrations of TCE detected in static vapor samples collected from well SVE-3 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, and 4 January 2001 were 25, 7.4, 3.8, and 1.4 ppmv, respectively. These data indicate that the concentration of TCE has decreased 94 percent after nine months of system operation, and

that about 10 percent of the decrease occurred during the last three months of system operation.

<u>VMP-1</u>: The concentrations of TCE detected in static vapor samples collected from well VMP-1 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, and 4 January 2001 are 29, 0.13, 0.47, and 0.93 ppmv, respectively. These data indicate that the concentration of TCE has decreased 97 percent after nine months of system operation, and that the concentration of TCE has not changed significantly at this location during the last six months of system operation.

<u>VMP-2</u>: The concentrations of TCE detected in static vapor samples collected from well VMP-2 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, and 4 January 2001 are 43, 5.2, 0.52, and 0.13 ppmv, respectively. These data indicate that the concentration of TCE has decreased 99 percent after nine months of system operation, and that about one percent of the decrease at this location occurred during the last three months of system operation.

<u>SVE-D1</u>: The concentrations of TCE detected in static vapor samples collected from well SVE-D1 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, and 4 January 2001 are 1,000, 92, 120, and 41 ppmv, respectively. These data indicate that the concentration of TCE has decreased 96 percent decrease after nine months of system operation, and that about five percent of the decrease occurred during the last three months of system operation.

VMP-D1: The concentrations of TCE detected in static vapor samples collected from well VMP-D1 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, and 4 January 2001 are 460, 9.4, 8.6, and 1.6 ppmv, respectively. These data indicate that the concentration of TCE has decreased 96 percent after nine months of system operation, and that about two percent of the decrease at this location occurred during the last three months of system operation.

<u>VMP-D2</u>: The concentrations of TCE detected in static vapor samples collected from well VMP-D2 during the sampling events of 16 March 2000, 6 July 2000, 28 September 2000, and 4 January 2001 are 39, 5.7, 9.3, and 3.0 ppmv, respectively. These data indicate that the concentration of TCE has decreased 92 percent after nine months of system operation, and that the concentration of TCE did not change significantly at this location during the last six months of system operation.

Note that the concentrations of TCE detected in samples of soil vapor collected from wells VMP-D1 and VMP-D2 did not decrease significantly after these wells were converted to extraction wells in July 2000.

12

2000-Q4 Report.doc EKI 991103.01

3.5. Request for No Further Action for Soil at the Site

In the previous progress report for the Site (EKI, 26 October 2000), it was proposed that one of the following criteria be used to assess appropriate conditions for closure of soil vapor extraction at the Site:

- 1. Stable or asymptotic VOC concentrations in samples of soil vapor collected from wells under static conditions (stable or asymptotic conditions will be considered achieved when the TCE and/or total VOC concentrations in samples of soil gas decrease by less than 10 percent between consecutive sampling events); or
- 2. Stable or asymptotic and very low VOC removal rates that are not sufficient to warrant additional soil vapor extraction.

The data presented above in Sections 3.3 and 3.4 indicate that substantial remediation of vadose zone soil has occurred during operation of the SVE system at the Site, and that the concentrations of VOCs in soil gas beneath the Site have stabilized at low levels relative to the concentrations measured at the time of system startup. As shown on Figures 10a through 10f, the total concentrations of VOCs in the system blower influent and in the soil vapor extraction and monitoring wells at the Site have decreased asymptotically. With the exception of extraction well SVE-2, the total VOC concentration asymptotes for the system blower influent and the soil vapor extraction and monitoring wells are at least 90 percent lower than the concentrations measured at the time of system startup in March 2000. At extraction well SVE-2, the total concentration of VOCs appears to have decreased about 55 to 72 percent, and mass removal estimates and field monitoring data suggest that most of the soil remediation at this location occurred during the first six months of system operation. At the system blower and all but one of the soil vapor extraction and monitoring wells, ten percent or less of the decrease in total VOC concentrations occurred during the final three months of system operation. These data indicate that the concentrations of VOCs in soil gas beneath the Site are not likely to decrease significantly with continued operation of the SVE system.

As shown in Figure 11 and discussed above in Section 3.3.2, the rate of VOC mass removal by the SVE system at the Site also has decreased to a low, stable value. Based on measurements made at the blower inlet, it is estimated that 9 pounds of VOCs, including 4 pounds of TCE, were extracted from soil at the Site during the last three months of system operation. This represents only about 7 percent of the cumulative mass removal by the SVE system. The average mass removal rate during this reporting period was approximately 80 percent lower than the mass removal rate during the previous reporting period. Moreover, the daily mass removal rates by the SVE system do not appear to have changed significantly during the last three months of system operation. Thus, the rate of VOC mass removal by the SVE system has reached a low and stable level that does not warrant additional soil vapor extraction at the Site.

13

The data presented above indicate the SVE system at the Site has achieved appropriate conditions for closure of soil remediation activities at the Site. At this time, Webb requests that the RWQCB issue a no further action letter for soil at the Site.

4. PLANNED ACTIVITIES FOR NEXT QUARTER

During the next quarter, the depth to groundwater in the monitoring wells at the Site will continue to be measured on a monthly basis. Samples of groundwater will be collected from each of the groundwater monitoring wells at the Site during March 2001. These samples will be analyzed for VOCs using EPA Method 8260B. At the request of the RWQCB, Webb will notify the RWQCB of the schedule for sampling of the wells at the Site to allow a representative of the Water Replenishment District of Southern California to collect duplicate samples for chromium analyses.

As discussed above in Section 3.5, it does not appear that additional operation of the SVE system at the Site will result in significant additional remediation of soil, and Webb requests that the RWQCB issue a no further action letter for soil at the Site. Therefore, the SVE system has been shut down pending review of this progress report and Webb's request by the RWQCB.

During November 2000, Webb submitted the Report on Site Conditions, Local Hydrogeology, and Offsite Groundwater Production and Work Plan for Groundwater Remediation for the Jervis B. Webb Company Of California Property (EKI, 30 November 2000) to the RWQCB. This document was prepared in response to requests presented by the RWQCB in its letter to Webb dated 18 September 2000. In its letter, the RWQCB requested that Webb submit a work plan for additional groundwater investigation at the Site, and submit information regarding drinking water aquifers, groundwater production wells, and bodies of surface water within a one-mile radius of the Site. At this time, Webb believes that subsurface characterization and soil remediation activities at the Site are sufficiently complete to allow the initiation of remedial measures for groundwater. The document submitted to the RWQCB presents a work plan for implementation of air sparging for enhanced recovery of VOCs from groundwater beneath the Site. Provided that the review by the RWQCB is prompt, Webb intends to leave the SVE system at the Site in place until the RWQCB approves the work plan for implementation of air sparging.

EKI 991103.01

5. SUMMARY

Gauging of the depth to the groundwater table was performed at the groundwater monitoring wells at the Site on 26 October, 21 November, and 5 December 2000. On the basis of these measurements, the predominant direction of groundwater flow appears to be toward the south-southeast under both the Webb and Reliable Steel properties. This estimated direction of groundwater flow is consistent with previous groundwater monitoring at the Site.

The only VOCs detected in the samples of groundwater collected at the Site on 5 December 2000 were TCE, c-1,2-DCE, and 1,1-DCA. Consistent with previous results, TCE was the chemical of concern detected with the greatest frequency (five of six samples) and at the highest concentration (30,000 ug/L in well MW-1). The concentrations of TCE, c-1,2-DCE, and 1,1-DCA detected in samples of the groundwater collected at the Site during December 2000 were within the ranges of concentrations detected during previous monitoring at the Site.

Excluding planned shutdowns of the system for static vapor sampling, the SVE system at the Site operated approximately 84 percent of the time between system start-up on 16 March 2000 and the shutdown for static vapor sampling on 14 December 2000. Soil vapor samples were collected for laboratory analysis at the blower influent and soil vapor extraction wells SVE-1 and SVE-D1 three times during the fourth quarter of 2000. Soil vapor samples were collected two times during the quarter at each of the other soil vapor extraction wells and soil vapor monitoring probes at the Site. The primary analytes detected in these samples of soil vapor were TCE and PCE. It was estimated that 133 pounds of VOCs, including 108 pounds of TCE, have been extracted from the soil at the Site as of 14 December 2000.

The data presented in this progress report indicate that substantial remediation of vadose zone soil has occurred during nine months of operation of the SVE system at the Site, and that the concentrations of VOCs in soil gas beneath the Site have stabilized at low levels relative to the concentrations measured at the time of system startup. The total concentrations of VOCs in the system blower influent and in the soil vapor extraction and monitoring wells at the Site have decreased asymptotically. With the exception of extraction well SVE-2, the total VOC concentration asymptotes for the system blower influent and the soil vapor extraction and monitoring wells are at least 90 percent lower than the concentrations measured at the time of system startup in March 2000. At extraction well SVE-2, the total concentration of VOCs appears to have decreased about 55 to 72 percent, and mass removal estimates and field monitoring data suggest that most of the soil remediation at this location occurred during the first six months of system operation. At the system blower and all but one of the soil vapor extraction and monitoring wells, ten percent or less of the decrease in total VOC concentrations occurred during the final three months of system operation. These data

indicate that the concentrations of VOCs in soil gas beneath the Site are not likely to decrease significantly with continued operation of the SVE system.

The rate of VOC mass removal by the SVE system at the Site also has decreased to a low, stable value. Based on measurements made at the blower inlet, it is estimated that 9 pounds of VOCs, including 4 pounds of TCE, were extracted from soil at the Site during the last three months of system operation. This represents only about 7 percent of the cumulative mass removal by the SVE system. The average mass removal rate during this reporting period was approximately 80 percent lower than the mass removal rate during the previous reporting period. Moreover, the daily mass removal rates by the SVE system do not appear to have changed significantly during the last three months of system operation. Thus, the rate of VOC mass removal by the SVE system has reached a low and stable level that does not warrant additional soil vapor extraction at the Site.

The data presented above indicate the SVE system at the Site has achieved appropriate conditions for closure of soil remediation activities at the Site. At this time, Webb requests that the RWQCB issue a no further action letter for soil at the Site. The SVE system has been shut down pending review of this progress report and Webb's request by the RWQCB.

During November 2000, Webb submitted the Report on Site Conditions, Local Hydrogeology, and Offsite Groundwater Production and Work Plan for Groundwater Remediation for the Jervis B. Webb Company Of California Property (EKI, 30 November 2000) to the RWQCB. This document was prepared in response to requests presented by the RWQCB in its letter to Webb dated 18 September 2000. At this time, Webb believes that subsurface characterization and soil remediation activities at the Site are sufficiently complete to allow the initiation of remedial measures for groundwater. The document submitted to the RWQCB presents a work plan for implementation of air sparging for enhanced recovery of VOCs from groundwater beneath the Site. Provided that the review by the RWQCB is prompt, Webb intends to leave the SVE system at the Site in place until the RWQCB approves the work plan for implementation of air sparging.

6. REFERENCES AND PREVIOUS REPORTS

Erler & Kalinowski, Inc., 30 November 2000. Report on Site Conditions, Local Hydrogeology, and Offsite Groundwater Production and Work Plan for Groundwater Remediation for the Jervis B. Webb Company Of California Property, 5030 Firestone Boulevard, South Gate, California.

Erler & Kalinowski, Inc., 26 October 2000. Quarterly Progress Report for July through September 2000 for the Jervis B. Webb Company of California Property, 5030 Firestone Boulevard, South Gate, California.

Erler & Kalinowski, Inc., 16 August 2000. Quarterly Progress Report for April through June 2000, Jervis B. Webb Company Property, 5030 Firestone Boulevard, South Gate, California.

Erler & Kalinowski, Inc., 27 April 2000. Quarterly Progress Report for January through March 2000, Jervis B. Webb Company Property, 5030 Firestone Boulevard, South Gate, California.

Erler & Kalinowski, Inc., 4 February 2000. Quarterly Progress Report for September to December 1999, Jervis B. Webb Company Property, 5030 Firestone Boulevard, South Gate, California.

Erler & Kalinowski, Inc., 13 October 1999. Quarterly Progress Report for July to August 1999, Jervis B. Webb Company Property, 5030 Firestone Boulevard, South Gate, California.

Erler & Kalinowski, Inc., 30 July 1999. Quarterly Progress Report for April to June 1999, Jervis B. Webb Company Property, 5030 Firestone Boulevard, South Gate, California.

Erler & Kalinowski, Inc., 4 June 1999. Quarterly Progress Report for January to March 1999, Jervis B. Webb Company Property, 5030 Firestone Boulevard, South Gate, California.

Erler & Kalinowski, Inc., 14 April 1999. Work Plan for Clarifier and Removal and Soil Remediation by Soil Vapor Extraction at the Jervis B. Webb Company Property Located at 5030 Firestone Boulevard, South Gate, California.

Erler & Kalinowski, Inc., 13 January 1999. Additional Groundwater Investigation and Quarterly Monitoring Report for October to December 1998, Jervis B. Webb Company Property, 5030 Firestone Boulevard, South Gate, California.

18

Erler & Kalinowski, Inc., 21 October 1998. Transmittal of Results for Additional Groundwater Investigation and Proposed Well Installation at 5030 Firestone Boulevard, South Gate, California.

Erler & Kalinowski, Inc., 29 September 1998. Project Tasks, Schedule, and Work Plan for Additional Groundwater Investigation and Quarterly Groundwater Monitoring at the Jervis B. Webb Company Property.

Erler & Kalinowski, Inc., 30 June 1998. Phase II Groundwater Investigation Report at 5030 Firestone Boulevard in South Gate, California.

Erler & Kalinowski, Inc., 18 February 1998. Phase II Soil Investigation Report for the Jervis B. Webb Company Property at 5030 Firestone Boulevard in South Gate, California.

Erler & Kalinowski, Inc., 20 June 1996. Phase I Environmental Site Assessment of the Jervis B. Webb Properties at 9301 Rayo Avenue and 5030 Firestone Boulevard in South Gate, California.

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elevation of	Depth to	Elevation of	
Well ID	Date	Top-of-Casing	Water	Water Surface	Comments
		(ft msl)	(ft bgs)	(ft msl)	
MW-1	2/27/98	106.09	44.79	61.30	
	3/2/98	106.09	44.82	61.27	
	3/4/98	106.09	44.58	61.51	
	4/8/98	106.09	44.57	61.52	
	5/20/98	106.09	43.99	62.10	
	10/8/98	106.09	43.38	62.71	
	11/5/98	106.09	43.14	62.95	
	12/21/98	106.09	43.37	62.72	
	1/19/99	106.09	43.26	62.83	
	2/3/99	106.09	42.98	63.11	
	3/30/99	106.09	43.22	62.87	
	6/1/99	106.09	43.48	62.61	
	7/29/99	106.09	43.82	62.27	
	9/1/99	106.09	43.76	62.33	
	9/23/99	106.09	44.03	62.06	
	10/18/99	106.09	44.43	61.66	
	12/8/99	106.09	44.55	61.54	
	1/27/00	106.09	44.40	61.69	· ·
	2/28/00	106.09	44.34	61.75	
	3/15/00	106.09	44.06	62.03	
	4/13/00	106.09	44.73	61.36	
	5/18/00	106.09	44.58	61.51	
	6/20/00	106.09	44.60	61.49	
	7/13/00	106.09	45.17	60.92	
	8/17/00	106.09	45.30	60.79	
	9/7/00	106.09	45.15	60.94	
	10/26/00	106.09	45.87	60.22	
	11/21/00	106.09	45.60	60.49	
	12/5/00	106.09	45.72	60.37	
MW-2	2/27/98	106.65	44.02	62.63	
	3/2/98	106.65	44.06	62.59	
	3/4/98	106.65	44.13	62.52	
	4/8/98	106.65	NR		Truck parked on well.
	5/20/98	106.65	43.51	63.14	
	10/8/98	106.65	42.84	63.81	
	11/5/98	106.65	42.64	64.01	
	12/21/98	106.65	42.69	63.96	
	1/19/99	106.65	42.66	63.99	
	2/3/99	106.65	42.55	64.10	

Erler & Kalinowski, Inc.

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elevation of	Depth to	Elevation of	
Well ID	Date	Top-of-Casing	Water	Water Surface	Comments
		(ft msl)	(ft bgs)	(ft msl)	
MW-2	3/30/99	106.65	42.63	64.02	
(cont.)	6/1/99	106.65	42.91	63.74	
(,	7/29/99	106.65	43.13	63.52	
	9/1/99	106.65	43.14	63.51	
	9/23/99	106.65	43.35	63.30	
	10/18/99	106.65	43.60	63.05	
	12/8/99	106.65	43.62	63.03	
	1/27/00	106.65	43.86	62.79	
	2/28/00	106.65	43.86	62.79	
	3/15/00	106.65	43.62	63.03	
	4/13/00	106.65	43.92	62.73	
	5/18/00	106.65	43.50	63.15	
	6/20/00	106.65	43.48	63.17	
	7/13/00	106.65	43.29	63.36	
	8/17/00	106.65	43.38	63.27	
	9/7/00	106.65	44.30	62.35	
	10/26/00	106.65	44.74	61.91	
	11/21/00	106.65	44.52	62.13	
	12/5/00	106.65	44.51	62.14	· · · · · · · · · · · · · · · · · · ·
MW-3	2/27/98	105.87	44.55	61.32	
	3/2/98	105.87	44.56	61.31	
	3/4/98	105.87	44.40	61.47	
	4/8/98	105.87	44.39	61.48	
	5/20/98	105.87	43.80	62.07	
	10/8/98	105.87	43.26	62.61	
	11/5/98	105.87	43.60	62.27	,
	12/21/98	105.87	43.33	62.54	
	1/19/99	105.87	43.18	62.69	
	2/3/99	105.87	42.97	62.90	
	3/30/99	105.87	43.19	62.68	
	6/1/99	105.87	43.58	62.29	
	7/29/99	105.87	43.85	62.02	
	9/1/99	105.87	43.90	61.97	
	9/23/99	105.87	44.10	61.77	
	10/18/99	105.87	44.37	61.50	
	12/8/99	105.87	44.64	61.23	
	1/27/00	105.87	44.69	61.18	
	2/28/00	105.87	44.75	61.12	
	3/15/00	105.87	44.41	61.46	

Erler & Kalinowski, Inc.

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elevation of	Depth to	Elevation of	
Well ID	Date	Top-of-Casing	Water	Water Surface	Comments
		(ft msl)	(ft bgs)	(ft msl)	
MW-3	4/13/00	105.87	44.86	61.01	
(cont.)	5/18/00	105.87	44.94	60.93	
` ,	6/20/00	105.87	44.88	60.99	
	7/13/00	105.87	45.25	60.62	
	8/17/00	105.87	45.06	60.81	
	9/7/00	105.87	44.83	61.04	
	10/26/00	105.87	45.94	59.93	
	11/21/00	105.87	46.00	59.87	
	12/5/00	105.87	45.77	60.10	
MW-4	11/3/98	104.72	42.77	61.95	Well Developed
	11/5/98	104.72	42.64	62.08	
	12/21/98	104.72	42.93	61.79	
	1/19/99	104.72	42.80	61.92	
	2/3/99	104.72	42.63	62.09	
	3/30/99	104.72	42.89	61.83	
	6/1/99	104.72	43.28	61.44	
	7/29/99	104.72	43.63	61.09	
	9/1/99	104.72	43.70	61.02	
	9/23/99	104.72	43.96	60.76	
	10/18/99	104.72	44.22	60.50	
	12/8/99	104.72	44.48	60.24	
	1/27/00	104.72	44.70	60.02	
	2/28/00	104.72	NR		Truck parked on well.
	3/15/00	104.72	44.37	60.35	
	4/13/00	104.72	NR		Truck parked on well.
	5/18/00	104.72	44.81	59.91	
	6/20/00	104.72	44.94	59.78	
	7/13/00	104.72	45.10	59.62	
	8/17/00	104.72	45.36	59.36	
	9/7/00	104.72	45.31	59.41	
	10/26/00	104.72	45.89	58.83	
	11/21/00	104.72	45.86	58.86	
	12/5/00	104.72	45.71	59.01	
MW-5	11/3/98	106.13	43.32	62.81	Well Developed
	11/5/98	106.13	43.30	62.83	
	12/21/98	106.13	43.58	62.55	
	1/19/99	106.13	43.46	62.67	
	2/3/99	106.13	43.20	62.93	
	3/30/99	106.13	43.49	62.64	

Erler & Kalinowski, Inc.

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elevation of	Depth to	Elevation of	
Well ID	Date	Top-of-Casing	Water	Water Surface	Comments
		(ft msl)	(ft bgs)	(ft msl)	
MW-5	6/1/99	106.13	43.88	62.25	
(cont.)	7/29/99	106.13	44.19	61.94	;
	9/1/99	106.13	44.22	61.91	
	9/23/99	106.13	44.48	61.65	
	10/18/99	106.13	44.72	61.41	
	12/8/99	106.13	44.98	61.15	
	1/27/00	106.13	45.17	60.96	
	2/28/00	106.13	45.15	60.98	
	3/15/00	106.13	44.87	61.26	
	4/13/00	106.13	45.22	60.91	
	5/18/00	106.13	45.29	60.84	
	6/20/00	106.13	45.30	60.83	
	7/13/00	106.13	45.63	60.50	
	8/17/00	106.13	45.85	60.28	
	9/7/00	106.13	45.69	60.44	
	10/26/00	106.13	46.35	59.78	
	11/21/00	106.13	46.33	59.80	
	12/5/00	106.13	46.16	59.97	

NOTES:

ft msl = feet above mean sea level

ft bgs = feet beneath ground surface

NR = Not Recorded

- -- Not Applicable
- 1. Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-1, MW-2, and MW-3 were surveyed on 6 March 1998 by Rattray & Associates, Inc.
- 2. Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-4 and MW-5 were surveyed on 21 December 1998 by Rattray & Associates, Inc.

TABLE 2 Analytical Results for Groundwater Samples

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Commis		-		Α	nalyte Co	ncentratio	n			
Well ID	Sample Number	Sample	Benzene	Toluene	1,1-DCA	1,1-DCE	1,2-DCA	c-1,2-DCE	t-1,2-DCE	PCE	TCE	TDS
	_	Date	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)
MW-1	MW-1-0304	3/4/98	<100	<100	<100	220	<100	130	<100	140	24,000	
	MW-1-0304DUP	3/4/98	<100	<100	<100	210	<100	150	<100	160	25,000	
	MW-1-0520	5/20/98	<125	<125	<125	160	<125	130	<125	<125	24,000	1,500
	MW-1	11/5/98	<125	<125	<125	140	<125	160	<125	170	28,000	
	MW-1	2/3/99	<125	<125	<125	130	<125	160	<125	160	27,000	
	MW-1	6/1/99	<100	<100	<100	140	<100	190	<100	160	28,000	
	MW-1	9/1/99	<100	<100	140	220	<100	200	<100	190	32,000	
	MW-1	12/8/99	<250	<250	<250	<250	<250	<250	<250	<250	30,000	
	MW-1-A ⁽³⁾	12/8/99	<100	<100	110	150	<100	200	<100	160	33,000	
	MW-1	3/15/00	<100	<100	<100	160	<100	230	<100	150	30,000	
	MW-1	6/20/00	<100	<100	<100	<100	<100	<100	<100	<100	24,000	
	MW-1	9/7/00	<100	<100	<100	<100	<100	<100	<100	<100	21,000	
	MW-1	12/5/00	<100	<100	<100	<100	<100	<100	<100	<100	30,000	
MW-2	MW-2-0304	3/4/98	<10	<10	13	34	<10	65	<10	<10	2,700	
	MW-2-0520	5/20/98	<10	<10	14	38	<10	68	<10	<10	3,000	2,500
	MW-2	11/5/98	<10	<10	13	36	<10	68	<10	<10	3,200	
	MW-2	2/3/99	<10	<10	13	36	<10	70	<10	<10	3,200	
	MW-2	6/1/99	<10	<10	12	34	<10	68	<10	<10	2,800	
	MW-2	9/1/99	<10	<10	16	49	<10	72	<10	<10	3,100	
	MW-2	12/8/99	<13	<13	<13	<13	<13	57	<13	<13	2,400	
	MW-2-A ⁽³⁾	12/8/99	<10	<10	12	22	<10	63	<10	<10	2,600	
	MW-2	3/15/00	<10	<10	<10	<10	<10	74	<10	<10	2,800	
	MW-2	6/20/00	<10	<10	<10	<10	<10	46	<10	<10	2,000	
	MW-2	9/7/00	<10	<10	<10	<10	<10	42	<10	<10	1,800	
	MW-2	12/5/00	<10	<10	<10	<10	<10	50	<10	<10	2,300	

TABLE 2 Analytical Results for Groundwater Samples

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		0		·		Α	nalyte Co	ncentratio	n			
Well ID	Sample Number	Sample	Benzene	Toluene	1,1-DCA	1,1-DCE	1,2-DCA	c-1,2-DCE	t-1,2-DCE	PCE	TCE	TDS
		Date	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)
MW-3	MW-3-0304	3/4/98	<10	13	14	82	<10	200	<10	<10	2,800	-
	MW-3-0520	5/20/98	<10	<10	13	58	<10	230	15	<10	2,800	1,100
	MW-3	11/5/98	<10	<10	11	66	<10	240	18	<10	2,300	
	MW-3	2/3/99	<10	<10	11	64	<10	220	18	<10	2,000	
	MW-3	6/1/99	<10	<10	11	66	53	240	18	<10	1,900	**
	MW-3	9/1/99	<10	<10	13	80	<10	270	20	<10	2,600	
	MW-3	12/8/99	<13	<13	<13	<13	<13	220	<13	<13	2,500	
	MW-3-A ⁽³⁾	12/8/99	<10	<10	13	55	<10	240	19	<10	2,900	
	MW-3	3/15/00	<10	<10	11	61	<10	300	20	<10	3,100	
	MW-3	6/20/00	<10	<10	10	<10	<10	170	14	<10	1,900	
	MW-3-DUP	6/20/00	<10	<10	11	<10	<10	200	16	<10	2,100	
	MW-3	9/7/00	<10	<10	<10	<10	<10	160	<10	<10	1,700	
	MW-3-DUP	9/7/00	<10	<10	<10	<10	<10	160	<10	<10	1,700	
	MW-3	12/5/00	<10	<10	<10	<10	<10	200	<10	<10	2,400	-
	MW-3-DUP	12/5/00	<10	<10	20	<10	<10	210	<10	<10	2,500	
MW-4	MW-4	11/5/98	<0.5	<0.5	<0.5	<0.5	<0.5	0.67	<0.5	<0.5	6.7	
	MW-4	2/3/99	<0.5	<0.5	<0.5	<0.5	2.1	<0.5	<0.5	<0.5	<0.5	
	MW-4	6/1/99	<0.5	<0.5	<0.5	<0.5	65	1.1	<0.5	<0.5	0.90	
	MW-4	9/1/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	MW-4	12/8/99	1.2	<0.5	<0.5	<0.5	<0.5	4.1	1.0	<0.5	17	
	MW-4-A ⁽³⁾	12/8/99	1.2	<0.5	<0.5	<0.5	<0.5	4.6	1.1	<0.5	18	
	MW-4	3/15/00	77	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.68	
	MW-4	6/20/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	MW-4	9/7/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-
	MW-4	12/5/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-

TABLE 2 Analytical Results for Groundwater Samples

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Commis				A	nalyte Co	ncentratio	n			
Well ID	Sample Number	Sample	Benzene	Toluene	1,1-DCA	1,1-DCE	1,2-DCA	c-1,2-DCE	t-1,2-DCE	PCE	TCE	TDS
		Date	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)
MW-5	MW-5	11/5/98	<25	<25	<25	42	<25	380	30	<25	5,000	
	MW-5-DUP	11/5/98	<25	<25	<25	40	<25	360	29	<25	4,800	
	MW-5	2/3/99	<25	<25	<25	49	<25	420	35	<25	5,100	
	MW-5-DUP	2/3/99	<25	<25	<25	45	<25	370	31	<25	4,500	
	MW-5	6/1/99	<25	<25	<25	52	35	420	36	<25	5,500	
	MW-5-DUP	6/1/99	<25	<25	<25	56	39	430	35	<25	5,300	
	MW-5	9/1/99	<25	<25	<25	40	<25	420	45	<25	5,500	
	MW-5-DUP	9/1/99	<25	<25	<25	69	<25	440	45	<25	6,000	
	MW-5	12/8/99	<50	<50	<50	<50	<50	390	<50	<50	5,100	
	MW-5-A ⁽³⁾	12/8/99	<25	<25	<25	<25	<25	410	25	<25	5,300	
	MW-5-DUP	12/8/99	<50	<50	<50	<50	<50	360	<50	<50	5,000	
	MW-5-DUP-A ⁽³⁾	12/8/99	<25	<25	<25	<25	<25	410	26	<25	5,300	
	MW-5	3/15/00	<50	<50	<50	<50	<50	440	<50	<50	5,500	
	MW-5-DUP	3/15/00	<50	<50	<50	<50	<50	450	<50	<50	5,800	
	MW-5	6/20/00	<25	<25	<25	<25	<25	350	<25	<25	4,400	
	MW-5	9/7/00	<10	<10	<10	<10	<10	280	<10	<10	3,700	
	MW-5	12/5/00	<10	<10	<10	<10	<10	190	<10	<10	4,700	

NOTES:

1,1-DCA = 1,1-dichloroethane

1,1-DCE = 1,1-dichloroethene

1,2-DCA = 1,2-dichloroethane

c-1,2-DCE = cis-1,2-dichloroethene

t-1,2-DCE = trans-1,2-dichloroethene

PCE = tetrachloroethene

TCE = trichloroethene

TDS = total dissolved solids

VOCs = volatile organic compounds

mg/l = milligrams per liter

ug/l = micrograms per liter

-- indicates not analyzed

- 1. Analyses performed by Orange Coast Analytical, Inc., in Tustin, California, using EPA Method 8260 for VOCs and EPA Method 160.1 for TDS.
- 2. < indicates that the analyte was not detected at a concentration above the indicated method detection limit.
- 3. Samples collected on 8 December 1999 were initially analyzed on 9 December 1999 and were re-analyzed on 17 December 1999 in an attempt to achieve lower method detection limits.

TABLE 3a Soil Vapor Extraction Data: Blower Influent

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed Time on		Flo	ow	.,	Total	TCE		nated emoval		ulative I Remova	
Date	Time	Hour Meter (hrs)	Operation Time	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	System	startup c											
3/16/00	16:45	5.6	0%	4.5	4.1	35	2,000+	860	1.8	1.9	0	0	:
3/17/00	7:00	20	100%	5.2	4.7	37	94	-					
3/18/00	6:30	45	100%	5.4	4.9	38	128	-					
	System	shut dov	vn on 3/18/0	0 at 9:4	l0. Syst	tem restar	ted on 3	3/19/00 at	6:30.				
3/19/00	6:30	48	13%	6.1	5.53	38	103	-					
3/20/00	6:30	72	100%	8.6	7.7	43	145	-					
3/21/00	7:00	96	100%	4.8	4.1	60	745	-					
3/22/00	7:30	121	100%	11	10	15	173	490	2.5	2.6	10	11	4A
3/30/00	11:00	316	100%	20	18	45	39	-					
4/6/00	11:00	483	100%	25	17	125	42	-					
4/13/00	8:00	648	100%	21	13	150	42	70	0.45	0.51	43	45	4A
4/20/00	7:30	815	100%	21	13	145	43	-					
4/27/00	7:00	983	100%	16	10	150	30	- .					
5/4/00	8:30	1,152	100%	16	10	150	20	-					
5/11/00	6:30	1,318	100%	14	9.0	150	20	-		1			
5/18/00	7:00	1,486	100%	19	12	150	38	53	0.32	0.34	56	60	4A
				28	18	150	38	-	0.47	0.50	-	-	
5/25/00	6:30	1,654	100%	18	12	150	19	-					
6/1/00	6:30	1,822	100%	18	11	150	34	-					
6/8/00	7:00	1,990	100%	26	16	155	27	-					i
6/15/00	7:30	2,158	100%	26	16	150	28	-					
	System	shut dov	vn on 6/21/0	0 at 17:	30. Sys	stem resta	rted on	7/6/00 at	10:00.				
7/6/00	10:23	2,312	30%	142	97	130	20	37	1.8	2.1	72	77	4B
7/13/00	12:00	2,485	102%	122	79	145	23	18	0.70	1.0	81	88	4A
7/20/00	7:30	2,648	100%	115	73	150	15	-					
	System	shut dov	vn on 7/26/0	0 at 6:3	0. Syst	em restar	ted on 7	//27/00 at	6:00.				
7/27/00	6:00	2,791	86%	75	49	140	14	-					
8/3/00	8:00	2,961	100%	75	49	140	15	-					
8/8/00	14:30	3,086	100%	77	50	140	15	-					
		1	vn on 8/15/0	,	30. Sys	stem resta	rted on	8/21/00 a	at 10:30.				
8/24/00	12:30	3,326		76	50		27	- 1		ŀ			
	System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.												
8/31/00	9:00	3,471	88%	64	45	120	36	_					
2,01100	J.00	٠, ٠, ٠											

TABLE 3a

Soil Vapor Extraction Data: Blower Influent

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed		Fle	ow		Total	TCE	Estin VOC Re	nated emoval		ulative M Removal	
Date	Time	Time on Hour Meter (hrs)	Operation Time	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total	TCE (lbs)	Total	Notes
	System	shut dov	vn on 9/6/00	at 15:0	0. Sys	tem restai	ted on 9	7/00.					
9/7/00	10:30	3,621	88%	66	46	125	9.7	-					
9/14/00	9:00	3,788	100%	66	43	140	13	5.6	0.12	0.29	104	124	4A
;	System	shut dov	vn on 9/14/0	00 for re	bound	test.							
9/28/00	11:24	3,788	0%	-	-	120	42	54	-	-	-	-	
	System	shut dov	vn on 9/28/0	00 at 12:	:00. Sy:	stem resta	arted on	10/1/00	at 6:30.				
10/1/00	6:30	3,791	4%	-	-	-	-	_					
;	System	shut dov	vn on 10/1/0	00 at 10:	30. Sy	stem resta	arted on	10/5/00	at 7:30.				
10/5/00	7:30	3,795	4%	73	52	120	296	_					
10/12/00	8:00	3,964	100%	74	52	120	39	-		ļ			
10/19/00	8:00	4,132	100%	72	51	120	39	-					
10/26/00	8:00	4,301	100%	75	54	115	18	2.3	0.061	0.15	106	128	4A
,	System	shut dov	vn on 10/31	/00 at 9	20. Sy	stem resta	arted on	11/2/00	at 8:00.				
11/2/00	8:00	4,422	72%	-	-	140	17	-					
;	System	shut dov	vn on 11/2/0	00 at 19	00. Sy	stem resta	arted on	11/9/00	at 7:30.				
11/9/00	7:30	4,433	7%	-	-	140	397	-					
	System	shut dov	vn on 11/9/0	00 at 15	:30. Sy	stem resta	arted on	11/16/00	at 10:00).			
11/16/00	10:00	4,441	5%	-	-	140	144	-					
	System	shut dov	vn on 11/17	/00 at 1:	2:00. S	ystem res	tarted o	n 11/23/0	0 at 7:30	o.			
11/23/00	7:30	4,443	1%	-		140	152	-	1				
11/30/00	7:30	4,611	100%	-	-	140	121	-					
	System	shut dov	vn on 12/6/(00 at 21	:00. Sy	stem resta	arted on	12/7/00	at 8:00.				
12/7/00	8:00	4,768	93%	-	-	140	107	-					
12/14/00	10:30	4,940	100%	57	38	140	6.2	6.7	0.13	0.23	108	133	4A
	System	shut dov	vn on 12/14	/00 for ı	rebound	d test.							
1/4/01	11:37	4,940	0%	170	111	140	44	30	-	-	-	-	
	System	shut dov	vn on 1/4/0	l (end o	f syste	m operation	on).						

TABLE 3a

Soil Vapor Extraction Data: Blower Influent

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed Time on		w		Total		Estimated VOC Removal		ulative N Removal	
Date	Time	Hour Meter (hrs)	Operation Time	(scfm)	, ,	by PID	Conc. by Lab (ppmv)	l VOCS	TCE (lbs)	Total VOCs (lbs)	Notes

NOTES:

TCE = trichloroethene acfm = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows (see Notes column in table):
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
 - B: Mass removal calculated using the previous mass removal rate.
- 5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples of undiluted blower influent. The total VOC mass removal rate presented in this table is the sum of the undiluted mass removal rates calculated for each VOC that was detected. See Table 5 for concentrations of each VOC detected in samples of soil vapor collected at the site.

TABLE 3b Soil Vapor Extraction Data: Extraction Well SVE-1

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed	Flo	ow		Total	TCE		ed VOC al Rates		ulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	Static va	por samp	le colle	cted on	3/16/00.							
3/16/00	9:25	5.6	0.04	0.04	35	865	10,000	0.18	0.19	0	0	
	System	startup or	3/16/00	at 16:0	o.	:			-			
3/17/00	7:00	20	0.04	0.04	37	191	-					
3/18/00	6:30	45	0.06	0.05	38	195	-					
		shut dow	n on 3/18	B/00 at 9	:40. Syst	em resta	rted on 3	/ /19/00 at 6:	:30.			
3/19/00	6:30	48	0.70	0.63	38	2,000+	l -					
3/20/00	6:30	72	0.63	0.56	43	2,000+	_					
3/21/00	7:00	96	0.61	0.52	60	2,000+	_					
3/22/00	7:30	121	0.58	0.56	15	2,000+	10,000	2.8	2.9	7.1	7.3	4A
3/30/00	11:00	316	0.87	0.79	38	1,799	-					
4/6/00	11:00	483	0.45	0.31	125	719	-					
4/13/00	8:00	648	0.85	0.54	150	716	6,500	1.7	1.8	57	58	4A
4/20/00	7:30	815	0.70	0.45	145	868	-					
4/27/00	7:00	983	0.87	0.55	150	915	-					
5/4/00	8:30	1,152	0.89	0.56	150	1,427	-					
5/11/00	6:30	1,318	0.92	0.58	150	2,000+	-					4.4
5/18/00	7:00	1,486	1.1	0.68	150	276	3,700	1.2	1.3	109	112	4A
		4.054	1.1	0.69	150	276	-	1.3	1.3	-	•	
5/25/00	6:30	1,654	1.3	0.84	150	146	-					
6/1/00	6:30	1,822	0.65	0.41 0.41	150	128 112	-					
6/8/00	7:00	1,990 2,158	0.67 0.65	0.41	155 150	105	<u> </u>					
6/15/00	7:30		1		•	1	eample :	l collected c	n 7/6/00			
7/0/00	•		_					Jonecleu U	170/00.			
7/6/00	9:49	2,312	•	0.89	•	1,582	3,300	-	-	-	-	
	•	restarted	_									
7/13/00	12:00	2,485	1.3	0.84	145	2,000+	2,200	0.92	0.95	154	159	4A
7/20/00	7:30	2,648	1.3	0.83	150	154	-					
	System	shut dow	n on 7/2	6/00 at 6		tem resta	rted on 7.	/27/00 at 6:	:00.			
7/27/00	6:00	2,791	2.0	1.3	140	77	-					
8/3/00	8:00	2,961	2.1	1.4	140	89	-					
8/8/00	14:30	3,086	2.1	1.4	140	92	-					
	System	shut dow	n on 8/1	5/00 at 1	i1:30. Sy	stem rest	arted on	8/21/00 at	10:30.			

Erler & Kalinowski, Inc.

TABLE 3b

Soil Vapor Extraction Data: Extraction Well SVE-1

Quarterly Progress Report for October through December 2000

		Elapsed	Fle	ow .		Total	TCE		ted VOC al Rates		ulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
8/24/00	12:30	3,326	2.3	1.5	140	622	-					
	System :	shut dow	n on 8/3					B/31/00 at !	9:00.			
8/31/00	9:00	3,471	0.96	0.68	120	1,820	-					
	System :	shut dow	n on 9/6	/00 at 15	:00. Syst	tem resta	rted on 9	7/00.				
9/7/00	10:30	3,621	1.1	0.78	125	62	-					
9/14/00	9:00	3,788	1.6	1.0	140	76	300	0.15	0.16	183	189	4A
	System :							sample co	llected on	9/28/00.		
9/28/00	11:07	•	1.6		120	•	•	-	-	-	-	
	System :	shut dow	n on 9/2	8/00 at 1	2:00. Sy	stem rest	arted on	10/1/00 at	6:30.			
10/1/00	6:30	3,791	-	-	-	-	-					
	System	shut dow	n on 10/	1/00 at 1	10:30. Sy	stem rest	arted on	10/5/00 at	7:30.			
10/5/00	7:30	3,795	2.3	1.6	120	2,000+	-					
10/12/00	8:00	3,964	2.4	1.7	120	1,687	-					
10/19/00	8:00	4,132	2.4	1.7	120	651	440	0.12	0.12	186	192	4A
10/26/00		4,301	2.4	1.7	115	385	140	0.12		100	192	4/1
	•						arted on	11/2/00 at i	o:uu.			
11/2/00	8:00	4,422	•	2.4	1		<u>-</u>					
	-		_		_	_	_	11/9/00 at '	7:30.			
11/9/00	7:30	4,433	•		140		•	1				
	System		_			_	-	11/16/00 a	t 10:00.			
11/16/00		4,441	•		140	•	•					
	System	shut dow	n on 11/	17/00 at	12:00. S	ystem res	started or	11/23/00	at 7:30.			
11/23/00	7:30	4,443	2.5	1.7	140	2,000+	-			1		
11/30/00	7:30	4,611	•	8.1	140	748	-					
	•						arted on	12/7/00 at	8:00.			
12/7/00	8:00	4,768	8.3	5.4	140	111	-	0.04	0.00	104	107	4.5
12/14/00		•	2.4	1.6	140	43	260	0.21	0.22	191	197	4A
	-	shut dow			-	_						
1/4/01	11:02	•	2.3	1.6	•	515	350	-	-	-	-	*
	System	shut dow	n on 1/4	/01 (end	of syste	m operati	on).	<u></u>		<u> </u>		

TABLE 3b

Soil Vapor Extraction Data: Extraction Well SVE-1

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date		Elapsed	Flo	ow		Total	TCE	l	ed VOC al Rates		ulative l Remova	i
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)		Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

NOTES:

TCE = trichloroethene
acfm = actual cubic feet per minute
°F = degrees Fahrenheit
hrs = hours
in-wc = inches of water column
lb/day = pounds per day
lbs = pounds

PID = photoionization detector
ppmv = parts per million by volume
scfm = standard cubic feet per minute
tr = trace (concentration detected at less than reporting limit)
VOCs = volatile organic compounds
- = no measurement
< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
- 5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected. See Table 5 for concentrations of each VOC detected in samples of soil vapor collected at the site.
- 7. Extraction well SVE-1 is screened in the shallow vadose zone from 19 to 25 feet below ground surface.

TABLE 3c Soil Vapor Extraction Data: Extraction Well SVE-2

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed	Fle	ow		Total	TCE		ted VOC al Rates	1	ulative Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	Static va	por samp	le colle	cted on	3/16/00.							
3/16/00	10:10	5.6	0.61	0.56	35	227	75	0.021	0.021	0	0	
	System	Startup oi	n 3/16/00	at 16:0	0.							
3/17/00	7:00	20.3	0.61	0.55	37	191	-					
3/18/00	6:30	44.7	0.61	0.55	38	33						
	System	shut dow	n on 3/1	8/00 at 9):40. Syst	tem resta	rted on 3	/19/00 at 6	:30.			
3/19/00	6:30	47.9	0.65	0.59	38	298	-]		
3/20/00	6:30	72.2	0.94	0.84	43	235	-					
3/21/00	7:00	96.3	0.89	0.76	60	227	-					
3/22/00	7:30	120.5	0.57	0.55	15	93	-					
3/30/00	11:00	316	0.59	0.53	38	78	-					
4/6/00	11:00	483	0.74	0.51	125	38	-			ł		
4/13/00	8:00	648	2.5	1.6	150	26	-	[
4/20/00	7:30	815	1.1	0.71	145	5.4	-					
4/27/00	7:00	983	2.4	1.5	150	2.7	-					
5/4/00	8:30	1,152	2.3	1.5	150	5.8	-					
5/11/00	6:30	1,318	2.2	1.4	150	5.2	-					
5/18/00	7:00	1,486	2.2	1.4	150	13	-			•		
			2.0	1.3	150	13	-					
5/25/00	6:30	1,654	2.1	1.3	150	6.8	-					
6/1/00	6:30	1,822	2.1	1.3	150	28	-					
6/8/00	7:00	1,990	2.1	1.3	155	42	-					
6/15/00	7:30	2,158	2.1	1.3	150	38	-					
	System	shut dow	n on 6/2	1/00 at 1	17:30. Sta	atic vapo	r sample	collected o	on 7/6/00.			
7/6/00	9:25	2,312	1.2	0.83	130	37	120	0.050	0.054	3.4	3.6	4A
	System	restarted	on 7/6/0	00 at 10:	00.							
7/13/00		2,485	1.3	0.80	145	6.8	_					
7/20/00		2,648	1.3	0.80	150	27	-					
					6:30. Sys	tem resta	irted on 7	//27/00 at 6	:00.			
7/27/00		2,791	1.6	1.1	140	18	-					
8/3/00	7:30	2,961	1.6	1.0	140	17	_					
8/8/00	14:30	3,086	1.6	1.0	140	14	-					
3,3,33			1		1	1	tarted on	8/21/00 at	10:30.			
0/04/00	-		1.9	1.2	140	1.7	<u> </u>		-			
8/24/00	12:30	3,326	1.9	1.2	140	1.7	<u> </u>	<u> </u>		<u> </u>		

Erler & Kalinowski, Inc.

TABLE 3c

Soil Vapor Extraction Data: Extraction Well SVE-2

Quarterly Progress Report for October through December 2000

		Elapsed	Flo	ow .		Total	TCE		ted VOC al Rates		iulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	Total VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	
	System :	shut dow	n on 8/3	0/00 at 1	3:30. Sy:	stem rest	arted on	8/31/00 at	9:00.			
8/31/00	9:00	3,471		1.1		22	-					
	System	shut dow	n on 9/6	00 at 15	: :00. Syst	tem resta	rted on 9	/7/00.				
9/7/00 9/14/00	10:30 9:00	3,621 3,788	1.6 1.6	1.1 1.1	125 140	16 20	- 77	0.041	0.042	6.2	6.5	4A
	System	shut dow	n on 9/1	4/00 for	rebound	test. Sta	tic vapor	sample co	llected on	9/28/00.		
9/28/00	10:50	3,788	1.4	1.0	120	61	110	-	-	-	-	
	System	shut dow	n on 9/2	8/00 at 1	2:00. Sy	stem rest	arted on	10/1/00 at	6:30.			
10/1/00	6:30	3,791	-	-	-	-	-					
	System	shut dow	n on 10/	1/00 at 1	0:30. Sy	stem rest	arted on	10/5/00 at	7:30.			
10/5/00 10/12/00 10/19/00 10/26/00	8:00	3,795 3,964 4,132 4,301	1.9 1.9 1.9 2.1	1.4 1.4 1.3 1.5	120 120 120 115	9.7 97 33 28	- - -					
	System		n on 10/	31/00 at	9:20. Sy	stem rest	arted on	11/2/00 at	8:00.			
11/2/00	8:00	4,422	-	-	140	6.0	-					
	System	shut dow	n on 11/	2/00 at 1	9:00. Sy	stem rest	arted on	11/9/00 at	7:30.			
11/9/00	7:30	4,433	-	-	140	8.2	-					
	System	shut dow	n on 11/	9/00 at 1	15:30. Sy	stem rest	tarted on	11/16/00 a	t 10:00.			
11/16/00	10:00	4,441	-	-	140	810	-					
	System	shut dow	n on 11/	17/00 at	12:00. S	ystem res	started or	11/23/00	at 7:30.			
11/23/00 11/30/00		4,443 4,611	-	-	140 140	7.5 5.3	-					
	System	shut dow	n on 12/	6/00 at 2	21:00. Sy	stem rest	tarted on	12/7/00 at	8:00.			
12/7/00 12/14/00		4,768 4,940	2.9	- 1.9	140 140	40 9.7	- 29	0.027	0.029	7.8	8.2	4A
	System	shut dow				•						
1/4/01	10:20 System	4,940 shut dow	•		120 of syste	25 m operati	34 ion).	-	-	-	-	

TABLE 3c

Soil Vapor Extraction Data: Extraction Well SVE-2

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date		Elapsed	Flo	ow.		Total	TCE		ed VOC al Rates		ulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

NOTES:

TCE = trichloroethene

acfm = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
- 5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-2. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected. See Table 5 for concentrations of each VOC detected in samples of soil vapor collected at the site.
- 7. Extraction well SVE-2 is screened in the shallow vadose zone from 18 to 24 feet below ground surface.

TABLE 3d

Soil Vapor Extraction Data: Extraction Well SVE-3

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed	FI	ow		Total	TCE		ed VOC al Rates		ulative Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	Static va	por samp	le colle	cted on	3/16/00.							
3/16/00	9:57	5.6	0.41	0.37	35	31	25	0.0047	0.0054	0	0	
	System	Startup o	n 3/16/00	at 16:0	0.							
3/17/00	7:00	20.3	0.98	0.89	37	6.1	-					
3/18/00	6:30	44.7	0.98	0.89	38	8.3	-					
	System	shut dow	n on 3/1	8/00 at 9	:40. Syst	em resta	rted on 3/	19/00 at 6:	30.			
3/19/00	6:30	47.9	0.98	0.89	38	45	-					
3/20/00	6:30	72.2	0.98	0.88	43	7.4	-					
3/21/00	7:00	96.3	1.0	0.85	60	11	-					
3/22/00	7:30	120.5	0.95	0.91	15	10	-					
3/30/00	11:00	316.0	0.76	0.69	38	29	-			İ		
4/6/00	11:00	483.0	1.6	1.1	125	25	-					
4/13/00	8:00	648.0	2.1	1.3	150	22	-					
4/20/00	7:30	815.0	1.7	1.1	145	6.8	-					
4/27/00	7:00	983.0	1.2	0.78	150	4.3	-					
5/4/00	8:30	1,152.0	1.6	0.98	150	2.8	-	1				
5/11/00	6:30	1,318.0	1.6	1.0	150	2.2	-					
5/18/00	7:00	1,486.0	1.6	0.98	150	9.0	-					
			1.6	0.98	150	9.0	-					
5/25/00	6:30	1,654.0	1.6	0.99	150	4.2	-					
6/1/00	6:30	1,822.0	1.5	0.95	150	7.5	-	1				
6/8/00	7:00	1,990.0	1.4	0.88	155	5.2	-	:				
6/15/00	7:30	2,158.0	1.4	0.90	150	4.9	-					
	System	shut dow	n on 6/2	1/00 at 1	7:30. Sta	itic vapor	sample o	collected o	n 7/6/00.			
7/6/00	8:46	2,312	2.3	1.5	130	7.3	7.4	0.0057	0.0095	0.50	0.71	4A
	System	restarted	on 7/6/0	0 at 10:0	00.							
7/13/00	-	2,485	2.3	1.5	145	3.5	-					
7/20/00		2,648	2.2	1.4	150	4.1	-					
					5:30. Syst	tem resta	rted on 7	/27/00 at 6	:00.			
7/27/00	-	2,791	1.9	1.3	140	5.1	-					
8/3/00	8:00	2,961	1.9	1.2	140	2.2	-					
8/8/00	14:30	2,961	1.9	1.3	140	2.3	-					
0,0,00			•		1		arted on	8/21/00 at	10:30.			
PIDAIOO	-	3,326	2.0	1.3	140	1.9	-	1				
8/24/00	12.30	3,320	2.0	1.5	1 170	1		<u> </u>		1	 	

Erler & Kalinowski, Inc.

TABLE 3d

Soil Vapor Extraction Data: Extraction Well SVE-3

Quarterly Progress Report for October through December 2000

	Elaps Time	Elapsod	FI	ow .			:		ed VOC		ulative	i i
		, ,				Total	TCE	Remov	al Rates		Remova	
Date	Time	Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	System	shut dow	n on 8/3	0/00 at 1	3:30. Sys	tem rest	arted on 8	3/31/00 at 9	9:00.			
8/31/00	9:00	3,471		1.0	120	2.6	-					
1		shut dow	ı n on 9/6/	00 at 15	:00. Syst	em resta	rted on 9/	7/00.				
9/7/00	10:30	3,621	1.4	1.0	125	1.2	-					
9/14/00	9:00	3,788	1.5	1.0	140	1.5	2.5	0.0012	0.0028	0.71	1.1	4A
	System	shut dow	n on 9/1	4/00 for	rebound t	est. Stat	ic vapor	sample co	llected on	9/28/00.		
9/28/00	9:52	3,788	-	-	120	8.0	3.8	-	-	-	-	
	System	shut dow	n on 9/2	8/00 at 1	2:00. Sys	stem rest	arted on	10/1/00 at (6:30.			
10/1/00	6:30	3,791	-	-	-	-	-					
	System	shut dow	n on 10/	1/00 at 1	0:30. Sys	stem rest	arted on	10/5/00 at 7	7:30.			
10/5/00	7:30	3,795	1.8	1.3	120	4.6	-					
10/12/00	8:00	3,964	1.9	1.3	120	5.6	-					
10/19/00	8:00	4,132	1.9	1.3	120	4.1	-					
10/26/00	8:00	4,301	1.9	1.3	115	4.1	-	ļ		ŀ		
1	System						arted on	11/2/00 at 8	3:00.			
11/2/00	8:00	4,422	1	4.7	•	0.5	-	1				
	System			2/00 at 1	9:00. Sys		arted on	11/9/00 at 1	7:30.			
11/9/00	7:30	•	1.9	1.3	•	•	-					
	System	shut dow	n on 11/	9/00 at 1	5:30. Sys	stem rest	arted on	11/16/00 at	10:00.			
11/16/00		4,441	•	-	140	8.9	-					
	System	shut dow	n on 11/	17/00 at	12:00. Sy	ystem res	started or	11/23/00 a	at 7:30.			
11/23/00	7:30	4,443	-	-	140	11.9	-					
11/30/00		4,611	5.6	3.6	140	6.2	-	İ				
	System	shut dow	n on 12	6/00 at 2			arted on	12/7/00 at	B:00.			
12/7/00	8:00	4,768	-	-	140	14.4	-				4.0	4.6
12/14/00		4,940	2.3	1.5	140	1.2	1.2	0.00089	0.0023	0.76	1.2	4A
	System				r rebound							
1/4/01	9:45	4,940		1.5	120	1.5	1.3	-	-	-	-	
	System	shut dow	n on 1/4	/01 (end	of syster	n operati	on).			<u> </u>		

TABLE 3d

Soil Vapor Extraction Data: Extraction Well SVE-3

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed		ow		Total	TCE		ed VOC al Rates		ulative l Remova	_
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

NOTES:

TCE = trichloroethene

acfm = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

Ib/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
- 5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-3. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected. See Table 5 for concentrations of each VOC detected in samples of soil vapor collected at the site.
- 7. Extraction well SVE-3 is screened in the shallow vadose zone from 19 to 25 feet below ground surface.

TABLE 3e Soil Vapor Extraction Data: Extraction Well SVE-D1

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed	Flo	ow .		T-4-1	TOF	1	ed VOC	l '	ulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	
	Static va	por samp	le colle	cted on	3/16/00.							
3/16/00	8:57	5.6	3.7	3.6	6.0	1,580	1,000	1.8	1.9	0	0	
,		startup or	່ າ 3/16/00	at 16:0	0.							÷
3/17/00	7:00	20.3	4.6	4.5	10	92	-					
3/18/00	6:30	44.7	5.3	5.2	10	131				E.		
0, 10, 00			i .	8/00 at 9):40. Syst	' tem resta	rted on 3.	/19/00 at 6	:30.			
3/19/00	6:30	48	0.0	0.0	0.0	30	Ιo					
3/20/00	6:30	72	5.8	5.7	9.0	164	0					
3/21/00	7:00	96	2.6	2.6	7.0	560	0					
3/22/00	7:30	121	8.9	8.6	15	70	440	1.9	2.0	8.8	9.1	4A
3/30/00	11:00	316	24	22	38	36	0					
4/6/00	11:00	483	25	17	125	30	0			}		
4/13/00	8:00	648	33	21	150	33	25	0.26	0.28	32	34	4A
4/20/00	7:30	815	28	18	145	28	0					
4/27/00	7:00	983	18	16	40	25	0					
5/4/00	8:30	1,152	16	10	135	20	0					
5/11/00	6:30	1,318	13	9.7	95	13	0				4.0	4.0
5/18/00	7:00	1,486	20	14	120	37	8.6	0.061	0.070	38	40	4A
			26	17	150	37	-	0.071	0.081	-	-	
5/25/00	6:30	1,654	18	11	150	16	-					
6/1/00	6:30	1,822	16	10	150	31	-					
6/8/00	7:00	1,990	21	13	155	31	-					!
6/15/00	7:30	2,158	21	13	150	31	١ -	l	710100			
	System					-		collected o	on 7/6/00.			
7/6/00	9:34	2,312	•	0	0	30	92	-	-	-	-	
	System	restarted	on 7/6/0	00 at 10:	00.							
7/13/00	12:00	2,485	34	22	145	37	5.1	0.056	0.25	40	47	4A
7/20/00	7:30	2,648	32	20	150	27	-					
	System	shut dow	n on 7/2	6/00 at	6:30. Sys	tem resta	rted on 7	//27/00 at 6	:00.			
7/27/00	6:00	2,791	26	17	140	9.4	-					
8/3/00	8:00	2,961	26	17	140	1.5	-			1		
8/8/00	14:30	3,086	26	17	140	1.8	-			1		
	System	shut dow	n on 8/1	5/00 at	11:30. Sy	stem res	tarted on	8/21/00 at	10:30.	<u> </u>	<u> </u>	

TABLE 3e

Soil Vapor Extraction Data: Extraction Well SVE-D1

Quarterly Progress Report for October through December 2000

			El	ow					ted VOC	Cum	ulative	Mass
		Elapsed				Total	TCE	Remov	al Rates		Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
8/24/00	12:30	3,226	27	18	140	17	-					
	System	shut dow	n on 8/3	0/00 at 1	3:30. Sys	stem rest	arted on	8/31/00 at	9:00.			
8/31/00	9:00	3,471	21	15	120	8.9	-					
	System	shut dow	n on 9/6	00 at 15	::00. Syst	em resta	rted on 9	/7/00.				
9/7/00	10:30	3,621	22	15	125	5.8	-					
9/14/00	9:00	3,788	20	13	140	24	4.0	0.026	0.23	43	60	4A
	System	shut dow	n on 9/1	4/00 for	rebound	test. Stat	tic vapor	sample co	llected on	9/28/00	•	
9/28/00	10:25	3,788	52	36	120	62	120	-	-	-	-	
	System	shut dow	n on 9/2	8/00 at 1	2:00. Sys	stem rest	arted on	10/1/00 at	6:30.			
10/1/00	6:30	3,791	-	-	-	-	-					
	System	shut dow	n on 10/	1/00 at 1	i0:30. Sys	stem rest	arted on	10/5/00 at	7:30.			
10/5/00	7:30	3,795	29	21	120	41	-					
10/12/00	8:00	3,964	28	20	120	72	-					
10/19/00	8:00	4,132	19	14	120	6.2	-					
10/26/00	8:00	4,301	20	14	115	5.8	2.4	0.017	0.081	43	63	4A
	System	shut dow	n on 10/	31/00 at	9:20. Sy	stem rest	arted on	11/2/00 at	8:00.			
11/2/00	8:00	4,422	1	15	140	1.5	-					
	System	shut dow	n on 11/	2/00 at 1	19:00. Sy	stem rest	arted on	11/9/00 at	7:30.			
11/9/00	7:30	4,433	22	15	140	4.9	-					
	System	shut dow	n on 11/	9/00 at 1	15:30. Sy	stem rest	arted on	11/16/00 a	t 10:00.			
11/16/00	10:00	4,441	24	15	140	38	-	1				
	System	shut dow	n on 11/	17/00 at	12:00. S	ystem res	started or	11/23/00	at 7:30.			
11/23/00	7:30	4,443	24	16	140	29	-					
11/30/00	7:30	4,611	-	-	140	23	-					
	System	shut dow	n on 12/	6/00 at 2	21:00. Sy	stem rest	tarted on	12/7/00 at	8:00.			
12/7/00	8:00	4,768	-	-	140	12	-					
12/14/00		4,940	16	11	140	3.1	2.7	0.014	0.025	44	64	4A
	System	shut dow	n on 12	14/00 fo	r rebound	d test.						
1/4/01 -	10:48	4,940	74	52	120	43	41	-	-	-	-	
,	System	shut dow	n on 1/4	/01 (end	d of syster	m operati	ion).					

TABLE 3e

Soil Vapor Extraction Data: Extraction Well SVE-D1

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

			Elapsed	Flo	ow		Total	TCE	Estimat Remova	ed VOC al Rates		ulative l Remova	
Da	ate	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

NOTES:

TCE = trichloroethene
acfm = actual cubic feet per minute
°F = degrees Fahrenheit
hrs = hours
in-wc = inches of water column
lb/day = pounds per day
lbs = pounds

PID = photoionization detector
ppmv = parts per million by volume
scfm = standard cubic feet per minute
tr = trace (concentration detected at less than reporting limit)
VOCs = volatile organic compounds
- = no measurement
< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
- 5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- 6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-D1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected. See Table 5 for concentrations of each VOC detected in samples of soil vapor collected at the site.
- 7. Extraction well SVE-D1 is screened in the shallow vadose zone from 30 to 40 feet below ground surface.

TABLE 3f

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D1

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed	Fle	ow		Total	TCE		ed VOC al Rates	i	ulative Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	Static va	por samp	le colle	cted on	3/16/00.							-
3/16/00	10:32	5.6	0	0	0	282	460					
	System	startup or	3/16/00	at 16:0	0 with VM	P-D1 use	ed as a m	onitoring v	vell.			
4/6/00	11:00	483	0	0	0	3.5	-					
4/13/00	8:00	648	0	0	0	23	-					
	System	shut dow	n on 6/2	1/00 at 1	7:30. Sta	tic vapor	sample (collected o	n 7/6/00.			
7/6/00	8:57	2,312	35	24	130	30	9.4	0.11	0.12	0	0	
	System	restarted	on 7/6/0	0 at 10:0	00 with VI	MP-D1 op	erating a	s an extra	ction well.			
7/13/00	12:00	2,485	33	21	145	3.6	0	!				
7/20/00	7:30	2,648	34	22	150	3.2	-					
7/27/00	6:00	2,791	26	17	140	9.4	_					
8/3/00	8:00	2,961	25	16	140	1.5	-			1		
8/8/00	14:30	3,086	24	16	140	1.6	-		40.00			
	System						tarted on	8/21/00 at	10:30.			
8/24/00	12:30	3,326		15	140	2.1	-					
	System	shut dow	n on 8/3	0/00 at 1	13:30. Sy	stem rest	tarted on	8/31/00 at	9:00.			
8/31/00	9:00	3,471	•	14	120	0.9	-					
	System	shut dow	n on 9/6	/00 at 15	5:00. Sys	tem resta	ırted on 9	/7/00.				
9/7/00	10:30	3,621	20	14	125	0.2	-					
9/14/00	9:00	3,788	20	-	140	1.2	1.4	0.0090	0.012	3.7	4.2	4A
	System	shut dow	n on 9/1	4/00 for	rebound	test. Sta	tic vapor	sample co	llected on	9/28/00	•	
9/28/00	10:08	3,788	59	41	120	6.3	8.6	-	-	-	-	
	System	shut dow	n on 9/2	8/00 at	12:00. Sy	stem resi	tarted on	10/1/00 at	6:30.			
10/1/00	6:30	3,791	-	-	-	-	-					
								10/5/00 at	7:30.			
10/5/00	7:30	3,795	25	18	120	8.4	-					
10/12/00		3,964	24	17	120	6.7	-					
10/19/00	8:00	4,132	25	17	120	9.4	-					
10/26/00		4,301	22	16	115	24	-					
	System	shut dow	n on 10	/31/00 at	9:20. Sy	stem res	tarted on	11/2/00 at	8:00. 	<u> </u>		

TABLE 3f

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D1

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed	FI	ow .		Total	TCE		ed VOC al Rates	_	ulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
11/2/00	8:00	4,422	26	17	140	0	-					
	System	shut dowi	n on 11/	2/00 at 1	9:00. Sys	stem rest	arted on	11/9/00 at	7:30.			
11/9/00	7:30	4,433	-	-	140	59	-					
	System shut down on 11		9/00 at 1	5:30. Sys	stem rest	arted on	11/16/00 at	10:00.				
11/16/00	10:00	4,441	64	42	140	8.6	-					
	System	shut dow	n on 11/	17/00 at	12:00. Sy	ystem res	started or	า 11/23/00 ส	at 7:30.			
11/23/00	7:30	4,443	60	40	140	87.4	-					:
11/30/00		4,611	39	26	140	27.9	-					
	System	shut dow	n on 12/	6/00 at 2	21:00. Sy	stem rest	arted on	12/7/00 at :	8:00.			
12/7/00	8:00	4,768	42	27	140	29.3	-				4.0	4.5
12/14/00	10:30	4,940	15	10	140	0.3	0.95	0.0047	0.0065	4.0	4.6	4A
	System	shut dow	n on 12/	14/00 fo	r rebound	l test.				!		
1/4/01	9:57	4,940	76	53	120	0.6	1.6	-	-	-	-	
	System	shut dow	n on 1/4	/01 (end	of syster	n operati	on).					

NOTES:

TCE = trichloroethene

acfm = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
- 5. Well VMP-D1 was first used as an extraction well on 6 July 2000.

Erler & Kalinowski, Inc.

5 February 2001

TABLE 3f

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D1

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed		ow		Total	TCE		ed VOC al Rates		ulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

^{6.} Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well VMP-D1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected. See Table 5 for concentrations of each VOC detected in samples of soil vapor collected at the site.

7. Extraction well VMP-D1 is screened in the shallow vadose zone from 30 to 40 feet below ground surface.

TABLE 3g

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D2

Quarterly Progress Report for October through December 2000

		Elapsed	Flo	ow		Total	TCE	1	ed VOC al Rates	l	ulative Remova	1
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
	Static va	por samp	le colle	cted on	3/16/00.				-			
3/16/00	10:50	5.6	0	0	0	76	39					
	System	startup or	n 3/16/00	at 16:0	0 with VM	IP-D2 use	ed as a m	onitoring v	vell.			-
4/6/00	11:00	483	0	0	0	150	-					
4/13/00	8:00	648	0	0	0	27	-]		
	System	shut dow	n on 6/2	1/00 at 1	17:30. Sta	tic vapor	r sample (collected o	n 7/6/00.			
7/6/00	9:12	2,312	44	30	130	5.2	5.7	0.085	0.10	0	0	
	System	restarted	on 7/6/0	0 at 10:	00 with VI	MP-D2 op	erating a	s an extrac	ction well.			
7/13/00	12:00	2,485	41	26	145	5.8	-	1				
7/20/00	7:30	2,648	42	27	150	3.8	-					
7/27/00	6:00	2,791	21	14	140	8.7	-					
8/3/00	8:00	2,961	21	14	140	4.8	-					
8/8/00	14:30	3,086	22	14	140	4.3	-	ļ				
	System	shut dow	n on 8/1	5/00 at 1	11:30. Sy	stem rest	tarted on	8/21/00 at	10:30.			
8/24/00	12:30	3,326	26	17	140	8.8	-					
	System	shut dow	n on 8/3	0/00 at	13:30. Sy	stem res	tarted on	8/31/00 at	9:00.			
8/31/00	9:00	3,471	18	13	120	1.5	-					
	System	shut dow	n on 9/6	/00 at 1	5:00. Sys	tem resta	arted on 9	/7/00.				
9/7/00	10:30	3,621	17	12	125	0.6	-					
9/14/00	9:00	3,788	17	11	140	9.6	0.71	0.0040	0.038	2.8	4.4	4A
	System	shut dow	n on 9/1	4/00 for	rebound	test. Sta	itic vapor	sample co	llected on	9/28/00	•	
9/28/00	9:35	3,788	42	29	125	39	9.3	-	-	-	-	
	System	shut dow	n on 9/2	8/00 at	12:00. Sy	stem res	tarted on	10/1/00 at	6:30.			
10/1/00	6:30	3,791		-	-	-	-					
			•	/1/00 at	10:30. Sy	stem res	tarted on	10/5/00 at	7:30.			
10/5/00	7:30	3,795	23	16	120	24] -] .				
10/12/00		3,964	26	18	120	9.1	-					
10/19/00		4,132	25	18	120	10	-			1		
10/26/00	8:00	4,301	19	14	115	26	-					
	System	shut dow	n on 10	/31/00 a	t 9:20. Sy	stem res	tarted on	11/2/00 at	8:00.	<u></u>		

TABLE 3g

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D2

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed	Fk	ow .		Total	TCE		ed VOC al Rates		ulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)		Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
11/2/00	8:00	4,422	23	15	140	0	-					
	System	shut dow	n on 11/2	2/00 at 1	9:00. Sy	stem rest	arted on	11/9/00 at	7:30.			
11/9/00	7:30	4,433	-		140	14	-					
	System	shut dow	n on 11/	9/00 at 1	5:30. Sy	stem rest	arted on	11/16/00 at	10:00.			
11/16/00	10:00	4,441	-	-	140	15	-					
	System	shut dow	n on 11/	17/00 at	12:00. S	ystem res	started or	11/23/00 a	at 7:30.			
11/23/00	7:30	4,443	47	31	140	63	-			<u>.</u> [
11/30/00		4,611	1	18	140	45	-					
	System	shut dow	n on 12/	6/00 at 2	1:00. Sy	stem rest	arted on	12/7/00 at	8:00.			
12/7/00	8:00	4,768	11	7.4	140	40	-					
12/14/00	10:30	4,940	18	12	140	14	1.3	0.0078	0.091	3.0	7.5	4A
	System	shut dow	n on 12/	14/00 fo	r rebound	d test.						
1/4/01	9:57	4,940	78	55	120	3.4	3.0	-	-	-	-	
	System	shut dow	n on 1/4	/01 (end	of syster	m operati	on).					

NOTES:

TCE = trichloroethene

acfm = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement
- < = not detected at indicated method detection limit
- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- 3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- 4. Cumulative mass removal amounts are calculated as follows:
 - A: Mass removal calculated using an average of the previous and current mass removal rates.
- 5. Well VMP-D1 was first used as an extraction well on 6 July 2000.

Erler & Kalinowski, Inc.

5 February 2001

TABLE 3g

Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D2

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

		Elapsed	Flo	ow.		Total	TCE	Estimat Remova			ulative l Remova	
Date	Time	Time on Hour Meter (hrs)	(acfm)	(scfm)	Vacuum (in-wc)	VOCs by PID (ppmv)	Conc. by Lab (ppmv)	TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

^{6.} Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well VMP-D2. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected. See Table 5 for concentrations of each VOC detected in samples of soil vapor collected at the site.

7. Extraction well VMP-D1 is screened in the shallow vadose zone from 30 to 40 feet below ground surface.

TABLE 4 Field Data for Soil Vapor Monitoring Probes

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

	VN	1P-1	VN	IP-2	VM	P-D1	VM	P-D2
Date	Vacuum	Total VOCs by PID (1,2)	Vacuum	Total VOCs by PID (1,2)	Vacuum	Total VOCs by PID (1,3)	Vacuum	Total VOCs by PID (1,3)
	(in-wc)	(ppmv)	(in-wc)	(ppmv)	(in-wc)	(ppmv)	(in-wc)	(ppmv)
3/16/00	-	68	-	150	-	530	-	71
3/17/00	1.8	-	1.0	-	4.7	-	5.2	-
3/18/00	1.3	-	1.1	-	6.6	-	6.0	-
3/19/00	1.1	-	0.7	-	2.2	-	2.4	-
3/20/00	2.1	-	1.4	-	2.6	-	3.5	-
3/21/00	2.4	-	2.2	-	5.4	-	6.8	-
3/22/00	2.6	-	2.3	-	5.8	-	4.5	-
3/30/00	1.8	-	1.8	-	15	-	16	-
4/6/00	2.8	6.4	4.2	7.4	23	3.5	24	150
4/13/00	4.0	8.2	2.5	6.2	21	23	22	27
5/11/00	4.6	-	4.0	-	19	-	16	-
	3.2	-	3.4	-	17	-	18	-
5/18/00	3.8	-	2.7	-	21	-	22	-
7/6/00	-	0.0	-	2.6	-	-	-	-
7/13/00	2.6	-	1.9	-	-	-	-	-
7/20/00	2.9	-	2.1	-	-	-	-	-
7/27/00	2.6	-	1.9	-	-	-	-	-
9/14/00	5.2	0.5	2.4	0.7		-	-	-
9/28/00	_	1.3	-	2.4	-	-	-	-
10/26/00	11.5	13.2	11.5	2.2	_	-	-	-
12/14/00	7.3	-	0.6	-		-	-	-
1/4/01		0.9	-	0.4	<u>.</u>	-	-	<u>-</u>

NOTES:

in-wc = inches of water column PID = photoionization detector ppmv = parts per million by volume VOCs = volatile organic compounds

- = no measurement

- 1. PID calibrated with 100 ppmv of isobutylene.
- 2. Each shallow vapor monitoring probe was purged of approximately 5 to 7 cubic feet of vapor and then sampled and analyzed using a PID.
- 3. Each deep vapor monitoring probe was purged of approximately 50 to 65 cubic feet of vapor and then sampled and analyzed using a PID.
- 4. On days for which two vacuum and PID readings are provided, the values indicate initial and final readings during the site visit.
- 5. Probes VMP-D1 and VMP-D2 have been used as extraction wells since 6 July 2000. For data collected at wells VMP-D1 and VMP-D2, see Tables 3f and 3g, respectively.
- 6. Soil vapor monitoring probes VMP-1 and VMP-2 are screened in the shallow vadose zone from approximately 19 to 25 feet beneath the ground surface.
- 7. Soil vapor monitoring probes VMP-D1 and VMP-D2 are screened in the deep vadose zone from approximately 30 to 40 and 31 to 41 feet beneath the ground surface, respectively.

Erler & Kalinowski, Inc.

5 February 2001

TABLE 5
Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

										Analyte (Concentr	ation (ppi	mv)					
Location	Date	System Running?	Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	МЕК	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other	
Blower Influent	3/16/00 3/22/00 4/13/00	N Y Y	<21 <8.4 <2.1	<16 <6.3 <1.6	<16 <6.4 7.7	8.2 tr <5.0 0.76 tr	<13 <5.0 <1.3	<12 <4.6 <1.2	<14 <5.8 0.91 tr	<17 <6.8 0.90 tr	19 11 1.2	<9.2 3.0 tr <0.92	860 490 70	49 3.9 tr 2.1	<12 <4.6 <1.2	<12 <4.6 <1.2	- - -	
<u>.</u>	DUP 5/18/00 7/6/00	Y Y N	<2.1 <2.1 2.2	<1.6 <1.6 0.56 tr	8.5 <1.6 1.6	0.72 tr <1.3 0.51	<1.3 <1.3 <0.51	<1.2 <1.2 <0.46	<1.4 <1.5 0.48 tr	<1.7 <1.7 <0.68	1.1 2.2 0.82	<0.92 <0.93 0.19 tr	65 53 37	1.8 <1.3 <0.53	<1.2 <1.2 0.50	<1.2 <1.2 <0.46	- - Bromomethane	0.37 tr
															,		Chloroform CFC-11 CFC-113 1,1-DCA	0.37 tr 0.35 tr 0.38 0.26 tr
	7/13/00	Y	<0.84	10	<0.64	0.36 tr 0.27	<0.51 <0.13	0.66 0.20	<0.58 <0.14	<0.68 <0.17	0.82 0.25	<0.37 <0.09	18 5.6	<0.53 0.75	0.67 0.62	<0.46 0.14	<u>.</u>	
	9/14/00 9/28/00 10/26/00	Y N Y	<0.21 <0.84 <0.08	10 14 3.8	<0.16 <0.64 <0.06	0.27 0.48 tr 0.10	<0.13 <0.50 <0.05	0.20 0.75 0.14	<0.14 <0.58 <0.06	<0.17 <0.68 <0.07	0.25 0.95 0.23	<0.03 <0.37 <0.04	54 2.3	1.0 0.36	1.2 0.43	0.28 tr 0.16	- -	
	12/14/00 1/4/01	Y N	<0.17 <1.1	4.1 1.3	<0.13 <0.80	0.16 < 0.63	<0.10 <0.63	0.16 <0.58	<0.12 <0.72	<0.14 <0.85	1.4 0.42	<0.073 <0.46	6.7 30	0.47 0.45 tr	0.50 0.32 tr	0.29 <0.58	1,2-DCB -	0.048 tr
SVE-1	3/16/00 3/22/00 4/13/00	N Y Y	<210 <84 <210	<160 <63 <160	<160 <64 <160	<130 <50 <130	<130 <50 <130	<120 <46 <120	<140 <58 <140	<170 <68 <170	230 140 120	53 tr 43 <92	10,000 10,000 6,500	170 42 tr <130	<120 <46 <120	<120 <46 <120	-	
	5/18/00 7/6/00	Y N	<17 <42	<13 <31	<13 63	<10 <25	<10 <25	<9.2 <23	<12 <29	<14 <34	94 110	7.3 tr <19	3,700 3,300	<11 <27	<9.2 <23	<9.2 <23	-	
	7/13/00 9/14/00 9/28/00	Y	<21 <17 <8.4	<16 <13 <6.3	<16 <13 <6.4	<13 <10 <5.0	<13 <10 <5.0	<12 <9.2 <4.6	<15 <12 <5.8	<17 <14 <6.8	60 9.1 7.1	<9.3 <7.3 <3.7	2,200 300 230	<13 6.7 tr <5.3	<12 5.1 tr <4.6	<12 <9.2 <4.6	-	
	10/26/00 12/14/00	Y	<4.2 3.1 tr	<3.1 <3.1	<3.2 <3.2	<2.5 <2.5	<2.5 <2.5	<2.3 <2.3	<2.9 <2.9	<3.4 <3.4	3.9 8.1	<1.8 <1.8	140 260	<2.7 4.3	<2.3 <2.3	<2.3 <2.3	-	
ł	1/4/01	l N	<8.4	<6.3	<6.4	<5.0	<5.0	<4.6	<5.8	<6.8	5.5	<3.7	350	<5.3	<4.6	<4.6	-	

5 February 2001

TABLE 5 Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

										Analyte (Concentra	ation (ppi	nv)					
Location	Date	System Running?	Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other	
SVE-2	3/16/00	N	<1.7	<1.3	<1.3	0.72 tr	<1.0	<0.92	<1.2	<1.4	1.2	<0.73	75	<1.1	<0.92	<0.92	-	
1	DUP	N	<1.7	<1.3	<1.3	0.80 tr	<1.0	< 0.92	<1.2	<1.4	1.5	<0.73	96	1.3	<0.92	<0.92	-	
	7/6/00	N	<4.2	<3.1	6.6	<2.5	<2.5	<2.3	<2.9	<3.4	3.6	<1.9	120	<2.7	<2.3	<2.3	Chloroform	1.4 tr
	9/14/00	Y	<2.1	<1.6	<1.6	<1.3	<1.3	<1.2	<1.4	<1.7	0.98	<0.92	77	<1.3	<1.2	<1.2	-	
	9/28/00	N	<4.2	<3.1	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	1.4 tr	<1.8	110	<2.7	<2.3	<2.3	-	
	12/14/00	Υ	0.40 tr	<0.31	<0.32	<0.25	<0.25	<0.23	<0.29	<0.34	0.74	<0.18	29	1,1	<0.23	<0.23	-	
	1/4/01	N	<1.1	<0.78	<0.80	<0.63	< 0.63	<0.58	<0.72	<0.85	0.65	<0.46	34	<0.66	<0.58	<0.58	-	
SVE-3	3/16/00	N	<0.84	<0.63	<0.64	0.56	<0.50	<0.46	<0.58	<0.68	2.7	<0.37	25	<0.53	<0.46	<0.46	•	
	7/6/00	N	<0.21	<0.16	<0.16	0.19	<0.13	<0.12	<0.15	0.19	3.7	<0.093	7.4	<0.13	<0.12	<0.12	-	
	9/14/00	Y	<0.08	<0.06	<0.06	0.11	<0.05	<0.05	<0.06	<0.07	2.2	0.07	2.5	0.06	0.08	0.03 tr	-	
	9/28/00	N	<0.21	<0.16	<0.16	0.16	<0.13	<0.12	<0.14	0.56	3.8	0.095	3.8	<0.13	<0.12	<0.12	-	
	12/14/00	Y	<0.042	<0.031	<0.032	0.035	<0.025	<0.023	<0.029	<0.034	1.4	0.038	1.2	0.070	<0.023	<0.023	MTBE	0.031
	1/4/01	N	<0.084	<0.063	<0.064	0.034 tr	<0.050	<0.046	<0.058	<0.068	1.4	0.036 tr	1.3	<0.053	<0.046	<0.046	-	
VMP-1	3/16/00	N	<0.84	<0.63	<0.64	0.58	<0.50	<0.46	<0.58	<0.68	1.0	<0.37	29	<0.53	<0.46	<0.46	-	
	7/6/00	N	0.022	0.0011 tr	0.0043	0.011	<0.0013	0.0015	0.0010 tr	0.012	0.0028	0.0017	0.13	0.0045	0.0085	0.0039	Chloromethane	0.0021 tr
																	Chloroform	0.00054 tr
	ļ						ļ										CFC-11	0.00081 tr
1		1						ŀ									CFC-113	0.00060 tr
																	1,1-DCA	0.0023
		ļ						1									MTBE	0.0017
	9/14/00	Y	0.097	0.0078	<0.0064	<0.0050	<0.0050	0.0041 tr	0.0033 tr	0.089	0.025	<0.0037	0.29	0.022	0.023	0.0010	2-Hexanone	0.0090
			1													}	Styrene	0.0045 tr
	9/28/00	N	0.071	<0.013	<0.013	<0.010	<0.010	<0.0092	<0.012	0.061	0.040	<0.0073	0.47	1	0.0087 tr		-	
	1/4/01	N	<0.042	<0.031	<0.032	<0.025	<0.025	<0.023	<0.029	<0.034	0.099	<0.018	0.93	0.022 tr	0.032	0.014 tr	-	

TABLE 5
Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for October through December 2000

<u> </u>			··			· · · · · · · · · · · · · · · · · · ·				Analyte (Concentr	ation (ppr	nv)					
Location	Date	System Running?	Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other	
VMP-2	3/16/00	N	<1.7	<1.3	<1.3	<1.0	<1.0	<0.92	<1.2	<1.4	2.0	<0.73	43	1.5	<0.92	<0.92	-	
	7/6/00	N	<0.14	<0.10	<0.11	<0.085	<0.085	<0.077	<0.097	<0.11	0.24	<0.062	5.2	<0.089	<0.077	<0.077	-	0.0040
	9/14/00	Y	0.25	0.0091	<0.0080	<0.0063	0.011	0.0050 tr	0.0040 tr	0.21	0.18	0.011	0.52	0.027	0.027	0.012	2-Hexanone	0.0018
					ļ				}								4-Methyl-2-Pentanone	0.0054 tr
													0.50	0.00764	0.042	0.0007.4-	Styrene 2-Hexanone	0.0054 tr 0.0076 tr
	9/28/00	N	0.053	<0.013	<0.013	<0.010	0.010	<0.0092	<0.012	0.050	0.22	0.0070 tr	0.52	0.0076 tr	0.013	0.0067 tr 0.0058	Z-Hexanone MTBE	0.0076 tr
	1/4/01	N	0.015	<0.0078	<0.0080	<0.0063	0.0038 tr	0.0032 tr	<0.0072	<0.0085	0.029	<0.0046	0.13	0.015 <27	0.014 <23	<23	WILDE	U.0037 II
SVE-D1	3/16/00	N 	<42	<31	<32	<25	<25	<23	<29	<34	16 6.4	<18 <3.7	1,000 440	3.2 tr	<4.6	<4.6	-	
	3/22/00	Y	<8.4	<6.3	<6.4	11	<5.0	<4.6	<5.8	<6.8	0.4 0.28 tr	<0.46	25	0.40 tr	<0.58	<0.58	_	
	4/13/00	Y	<1.1	<0.78	1.2	0.99	0.87	<0.58	<0.72 <0.29	<0.85 <0.34	0.28 tr	<0.46	8.6	<0.27	<0.23	<0.23		
	5/18/00	Y	<0.42	0.19 tr	<0.32	0.30	0.30 <1.3	<0.23 <1.2	<1.5	<1.7	1.6	<0.19	92	0.90 tr	<1.2	<1.2	Chloroform	0.79 tr
	7/6/00	N N	5.3	<1.6 <1.6	3.3 4.3	0.66 tr 0.92 tr	<1.3	<1.2	<1.5	<1.7	1.5	<0.93	93	<1.3	<1.2	<1.2	Chloroform	0.98 tr
	DUP	N	<2.1	<1.0	4.3	0.92 tr	1.3	1.2	1.5	\ \1.7	1.3	\0.55	93	1.5	11.2	1.2	CFC-11	0.67 tr
												1					CFC-113	0.76
	7/13/00	Y	<0.42	25	<0.32	<0.25	<0.25	1.5	<0.29	<0.34	<0.15	<0.19	5.1	0.24 tr	1.4	<0.23		
	9/14/00	l 'v	<0.42	40	<0.64	<0.50	<0.50	1.1	<0.58	<0.68	0.16 tr	<0.37	4.0	3.7	3.6	0.81	-	
	DUP	, ,	<0.84	32	<0.64	<0.50	<0.50	0.59	<0.58	<0.68	<0.30	<0.37	2.9	2.4	1.8	0.41 tr	-	
	9/28/00	l 'n	<4.2	21	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	0.96 tr	<1.8	120	<2.7	<2.3	<2.3	_	
	DUP	l N	<4.2	23	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	1.1 tr	<1.8	130	<2.7	<2.3	<2.3	-	
	10/26/00	Y	<0.17	11	<0.13	<0.10	<0.10	0.31	<0.12	<0.14	0.05 tr	<0.07	2.4	1.0	1.1	0.44	-	
	12/14/00	Ý	<0.084	2.6	<0.064	<0.050	<0.050	<0.046	<0.058	<0.068	0.10	< 0.037	2.7	0.19	0.20	0.14	-	
	DUP	Ý	<0.084	2.6	<0.064	<0.050	<0.050	< 0.046	<0.058	<0.068	0.093	<0.037	2.7	0.18	0.17	0.12	-	
	1/4/01	N	<1.7	<1.3	<1,3	<1.0	<1.0	<0.092	<1.2	<1.4	0.32 tr	<0.73	41	<1.1	<0.92	<0.092	-	
	DUP	N	<1.7	<1.3	<1.3	<1.0	<1.0	<0.092	<1.2	<1.4	0.35 tr	<0.73	45	<1.1	<0.92	<0.092		

TABLE 5 Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for October through December 2000

										Analyte (Concentra	ation (pp	mv)					
Location	Date	System Running?	Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other	
VMP-D1	3/16/00	N	<17	<13	<13	5.8 tr	<10	<9.2	<12	<14	8.3	<7.3	460	11	<9.2	<9.2	-	
	7/6/00	N	<0.21	<0.16	<0.16	<0.13	<0.13	<0.12	<0.15	1.5	0.17	<0.093	9.4	<0.13	<0.12	<0.12	-	
	9/14/00	Y	<0.042	0.020 tr	<0.032	<0.025	0.039	0.013 tr	<0.029	<0.034	0.27	<0.018	1.4	0.061	0.081	0.037	Styrene	0.025
	9/28/00	N	<0.21	<0.16	<0.16	<0.13	<0.13	<0.12	<0.14	<0.17	0.38	<0.092	8.6	<0.13	<0.12	<0.12	-	ľ
	12/14/00	Y	<0.042	<0.031	<0.032	<0.025	0.022 tr	<0.023	<0.029	<0.034	0.25	<0.018	0.95	0.046	<0.023	<0.023	-	ľ
	1/4/01	N	<0.042	<0.031	<0.032	<0.025	<0.025	<0.023	<0.029	< 0.034	0.030	<0.018	1.6	0.014 tr	0.020 tr	<0.023	-	
VMP-D2	3/16/00	N	<0.84	<0.63	<0.64	1.2	<0.50	<0.46	<0.58	<0.68	0.75	<0.37	39	0.83	<0.46	<0.46	-	•
1	7/6/00	N	<0.21	<0.16	0.28	0.55	0.069 tr	<0.12	<0.15	0.34	0.35	<0.093	5.7	<0.13	<0.12	<0.12	1,1-DCA	0.067 tr
	9/14/00) Y	<0.08	5.6	<0.06	0.95	0.05 tr	0.20	<0.06	<0.07	0.14	<0.04	0.71	0.35	0.46	0.10	Chlorobenzene	0.29
																	Chloroform	0.60
			ļ												ŀ		1,1-DCA	0.08
}			1						1				!		<u> </u>		1,2-DCB	0.02 tr
1]		1,4-DCB	0.05
																	Styrene	0.03 tr
	9/28/00	l n	<0.42	25	<0.32	1.1	<0.25	1.4	<0.29	< 0.34	0.50	<0.18	9.3	2.2	2.3	0.27	Chlorobenzene	0.25
	12/14/00		<0.17	9.9	<0.13	0.45	<0.10	0.46	<0.12	<0.14	3.6	<0.073	1.3	1.2	1.3	0.74	1,1-DCA	0.056 tr
	120111100	,		""							ļ						1,2-DCB	0.13
]		1,4-DCB	0.079
	1/4/01	N	<0.11	1.8	<0.080	0.068	<0.063	0.12	<0.072	<0.085	0.17	<0.046	3.0	0.20	0.23	0.098	· <u>-</u>	
Equipment	3/16/00	 	<0.042	<0.031	<0.032	<0.025	<0.025	<0.023	<0.029	<0.034	0.064	<0.018	1.7	<0.027	<0.023	<0.023	-	
Blank	7/6/00	_	0.0071	0.00076	0.0011	<0.00025	<0.00025	0.00094	0.00033	0.0018	0.0016	<0.00019	0.00042	0.0037	0.0062	0.0029	Carbon Tet	0.00014 tr
Diam	1,0,00		1														CFC-11	0.00046
	1			1													CFC-113	0.00013
																	Chloromethane	0.00077
														}			1,2-DCB	0.00010 tr
			1		Į.												MTBE	0.0018
	1											<u> </u>					Styrene	0.00028

TABLE 5

Summary of Laboratory Analytical Data for Soil Vapor Samples

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

	Date	System Running?	Analyte Concentration (ppmv)															
Location			Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other	
Equipment	9/14/00	-	0.016	0.0055	<0.0016	<0.0013	<0.0013	0.0038	0.0076	0.0044	0.00047 tr	<0.00092	0.0013	0.021	0.022	0.010	MTBE	0.0039
Blank																	Styrene	0.0059
(cont.)	9/14/00	-	0.0097	0.0044	<0.0016	<0.0013	<0.0013	0.0022	0.0029	0.0018	0.0011	<0.00092	0.014	0.011	0.012	0.0055	MTBE	0.0026
																	Styrene	0.0029
	9/28/00	-	0.0094	0.0022 tr	<0.0032	<0.0025	<0.0025	0.0021 tr	0.027	0.0019 tr	<0.0015	<0.0018	<0.0019	0.0090	0.014	0.0073	MTBE	0.0032
1																	Styrene	0.0022 tr
	9/28/00	-	0.0078	0.0031	<0.0032	<0.0025	<0.0025	0.0015 tr	<0.0029	<0.0034	0.00093 tr	l	0.015	0.0052	0.0066	0.0031	MTBE	0.0026 tr
	1/4/01	-	0.015	0.0019	<0.0016	<0.0013	<0.0013	0.0035	0.0027	0.0050	<0.00074	<0.00092	0.0011	0.018	0.015	0.0063	MTBE	0.0037
																	Styrene	0.00061 tr
									ļ								Vinyl Acetate	0.0031
\	\ 			<u> </u>				1	[1			1		Vinyl Chloride	0.0013 tr
	1/4/01		0.014	0.0016	<0.0016	<0.0013	<0.0013	0.0019	0.0021	0.0016 tr	0.00080	<0.00092	0.0085	0.013	0.0079	0.0032	MTBE	0.0027

NOTES: Carbon Tet = Carbon tetrachloride

CFC-11 = Trichlorofluoromethane

CFC-113 = Trichiorotrifluoroethane

1,1-DCA = 1,1-Dichloroethane

1,2-DCB = 1,2-Dichlorobenzene

1,4-DCB = 1,4-Dichlorobenzene 1,1-DCE = 1,1-Dichloroethene c-1.2-DCE = cis-1.2-Dichloroethene

MEK = Methyl ethyl ketone (aka 2-Butanone)

MTBE = Methyl tert-butyl ether

PCE = Tetrachloroethene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

DUP = Duplicate sample

ppmy = parts per million by volume

tr = trace (concentration detected at less than method detection limit)

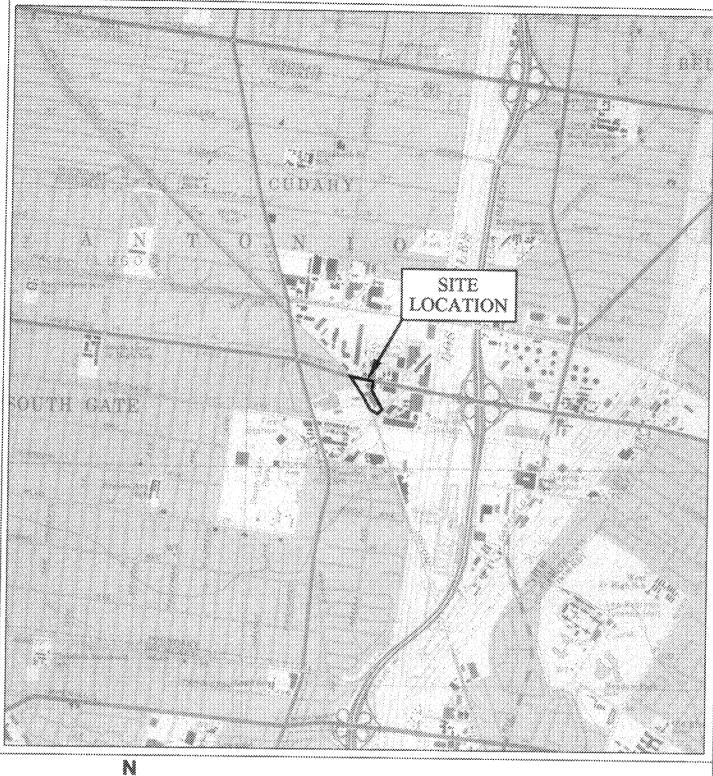
ug/l = micrograms per liter

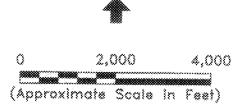
- = no measurement

< = not detected at indicated method detection limit

^{1.} Samples were collected in Tedlar bags and analyzed by Performance Analytical, Inc., in Simi Valley, California, using EPA Method TO-14A.

^{2.} Wells SVE-1, SVE-2, and SVE-3 are shallow zone extraction wells. Probes VMP-1 and VMP-2 are shallow zone monitoring probes. Well SVE-D1 is a deep zone extraction well. Wells VMP-D1 and VMP-D2 have been used as deep zone extraction wells since 6 July 2000. Wells VMP-D1 and VMP-D2 were used as deep zone monitoring probes prior to 6 July 2000.





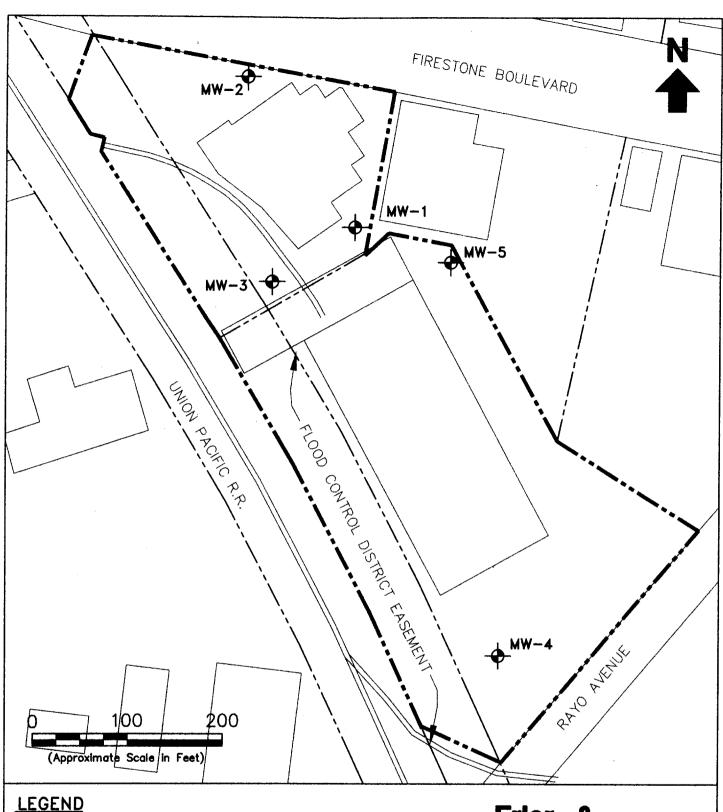
Source: U.S.G.S 7.5 Minute Series "South Gate" Quadrangle, 1964, photorevised 1981.

Erler & Kalinowski, Inc.

Site Location Map

Jervis B. Webb Company of California South Gate, California February 2001 EKI 991103.01

Figure





Groundwater Monitoring Well

--- Property Line/Site Boundary

Erler & Kalinowski, Inc.

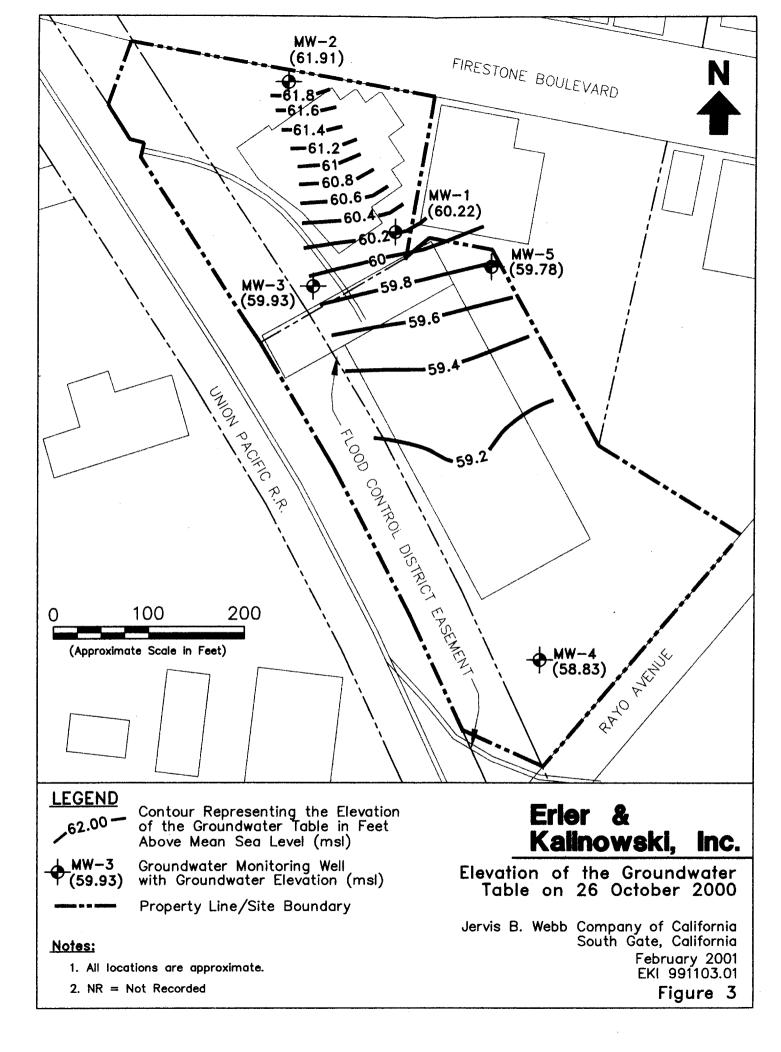
Groundwater Monitoring Well Locations

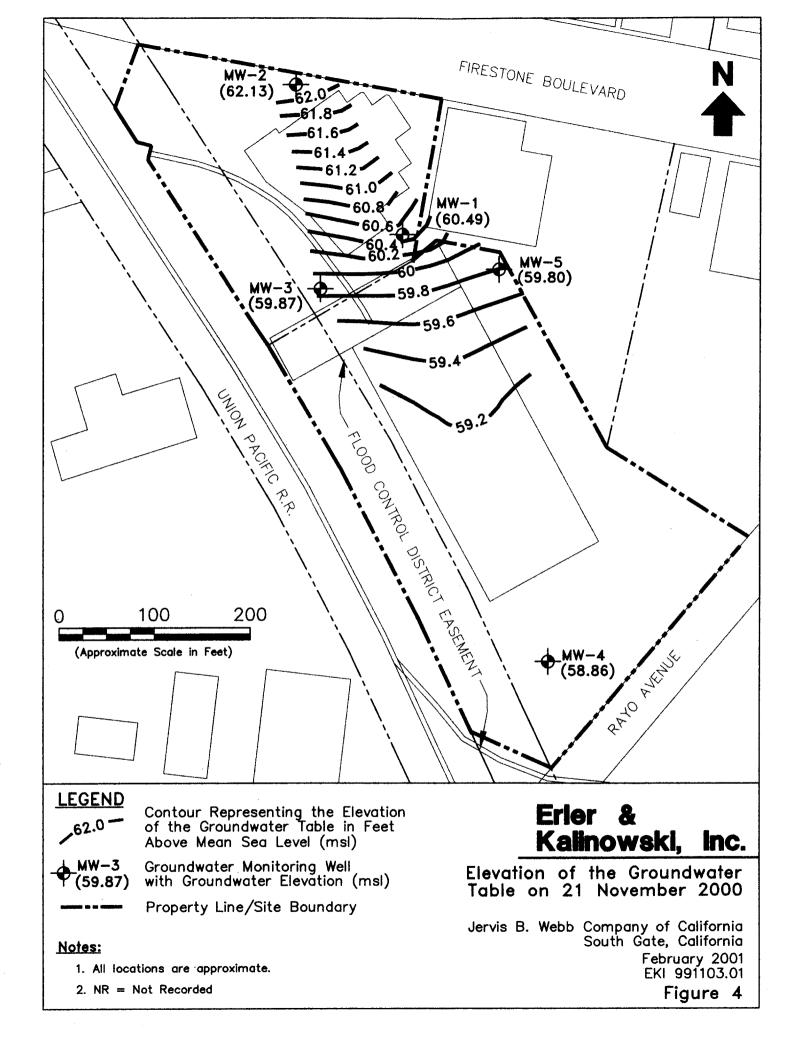
Jervis B. Webb Company of California South Gate, California February 2001 EKI 991103.01

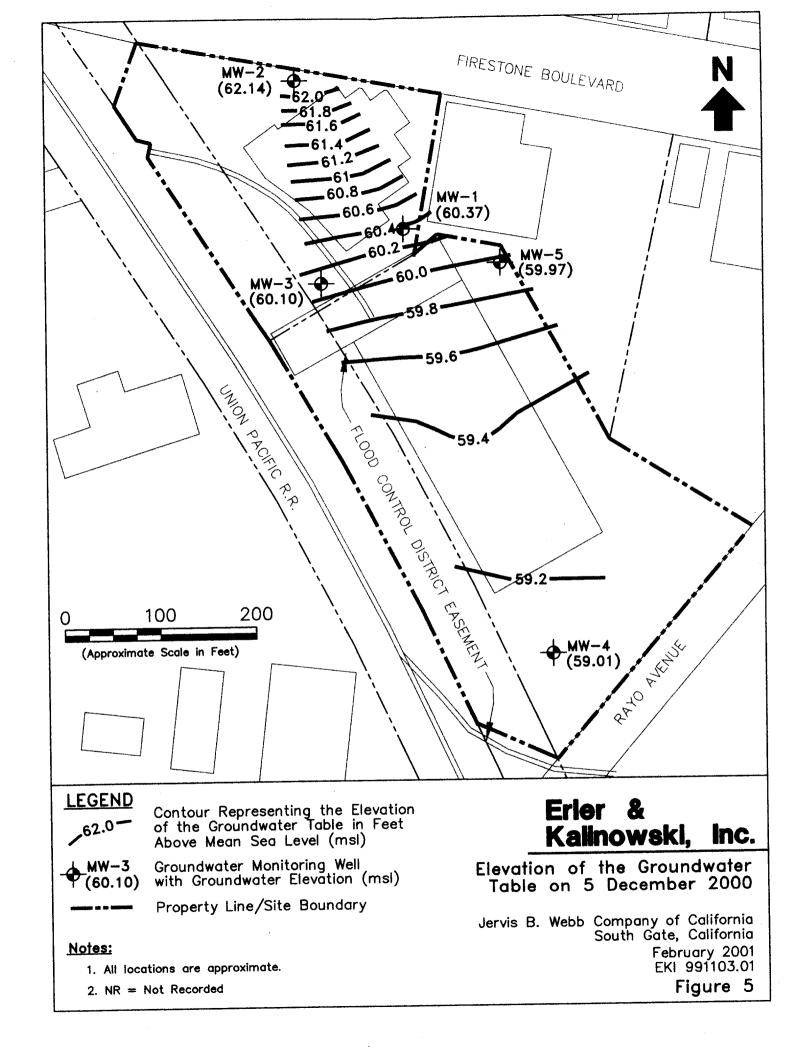
Figure 2

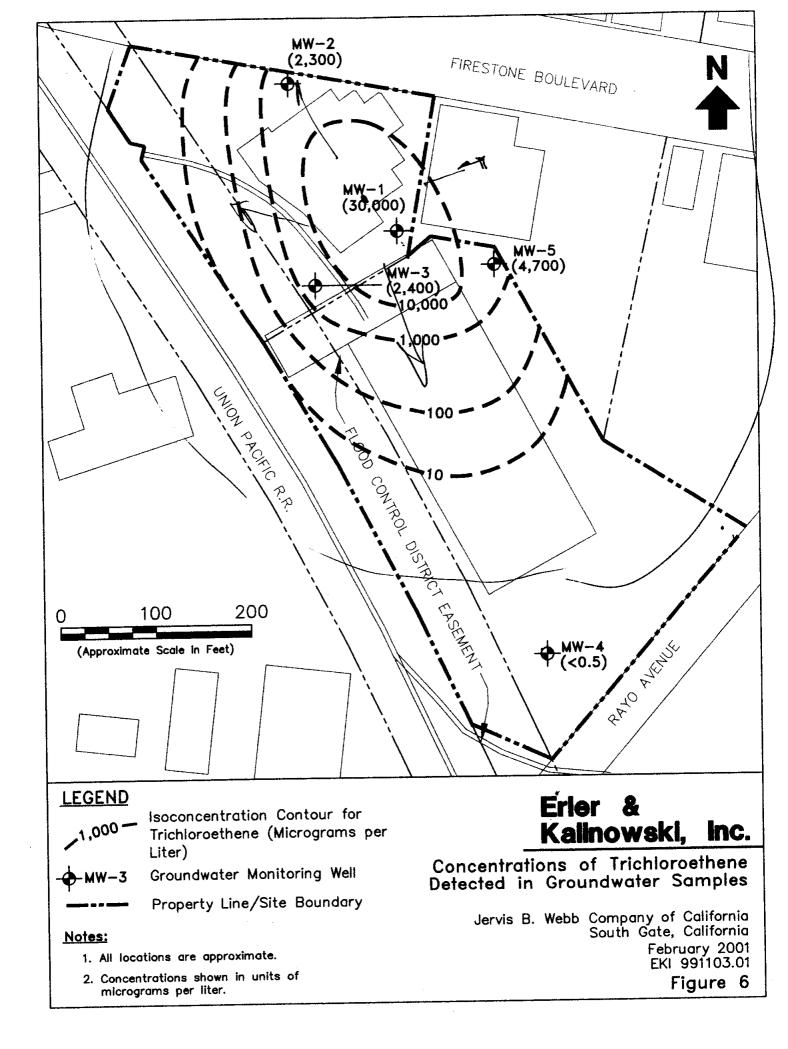
Notes:

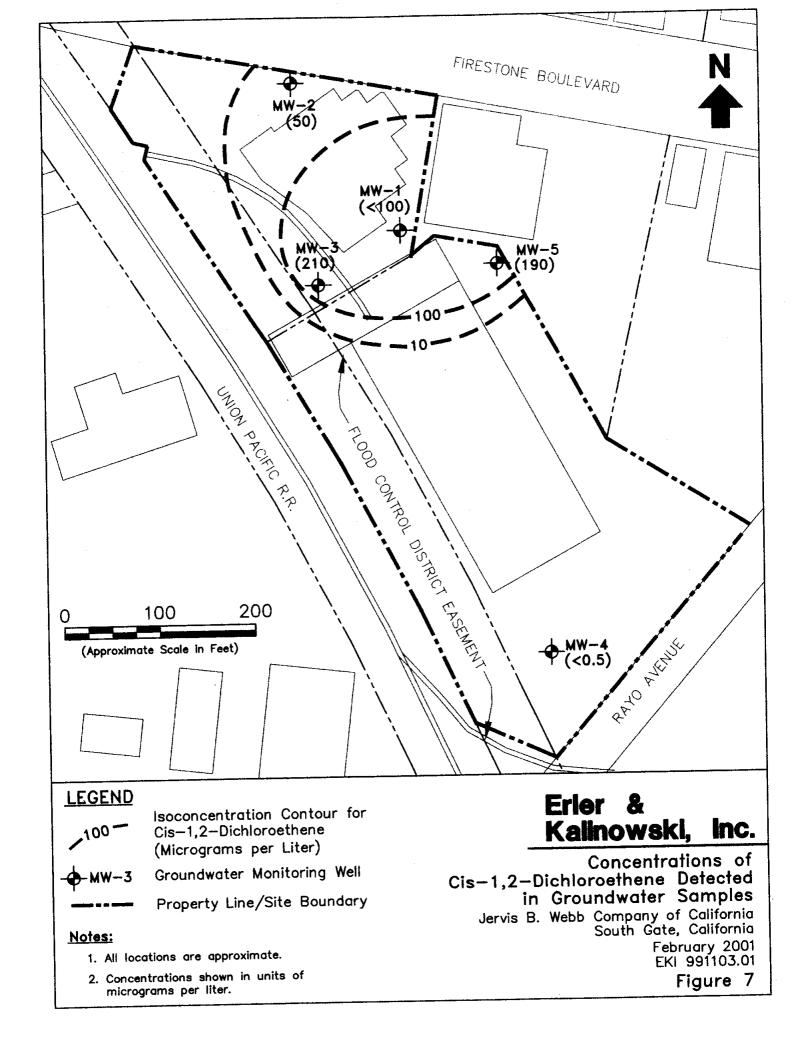
1. All locations are approximate.











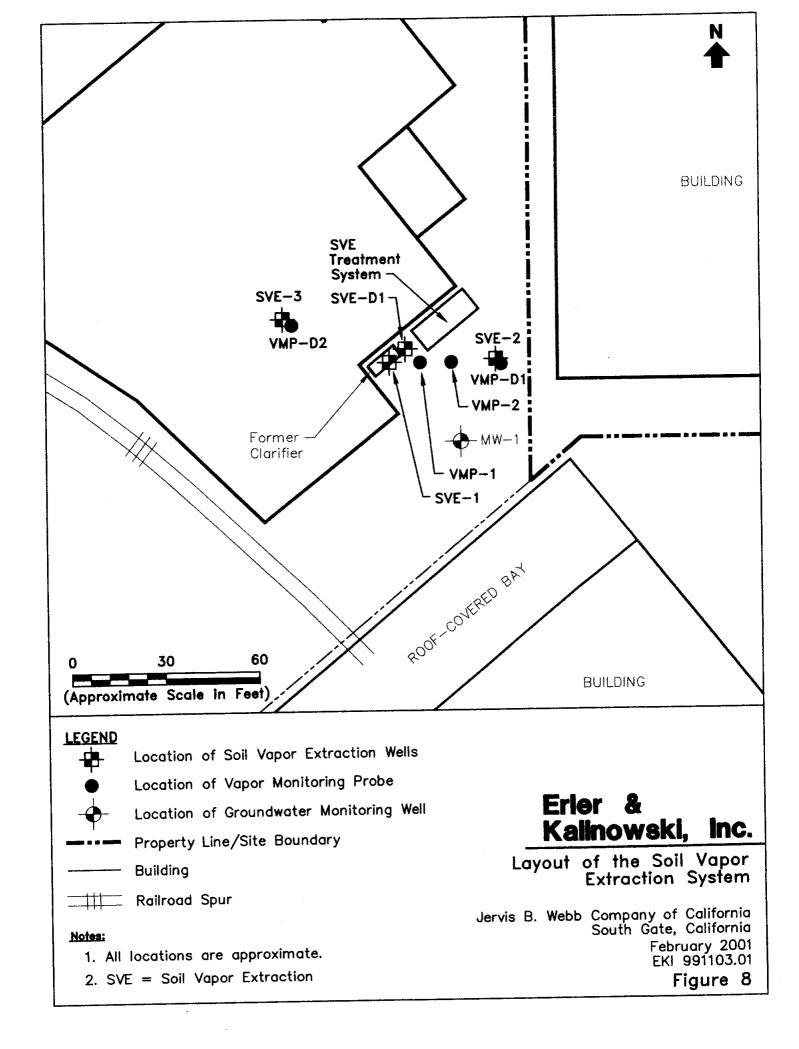


FIGURE 10a Concentrations of Total VOCs versus Time: Blower Influent

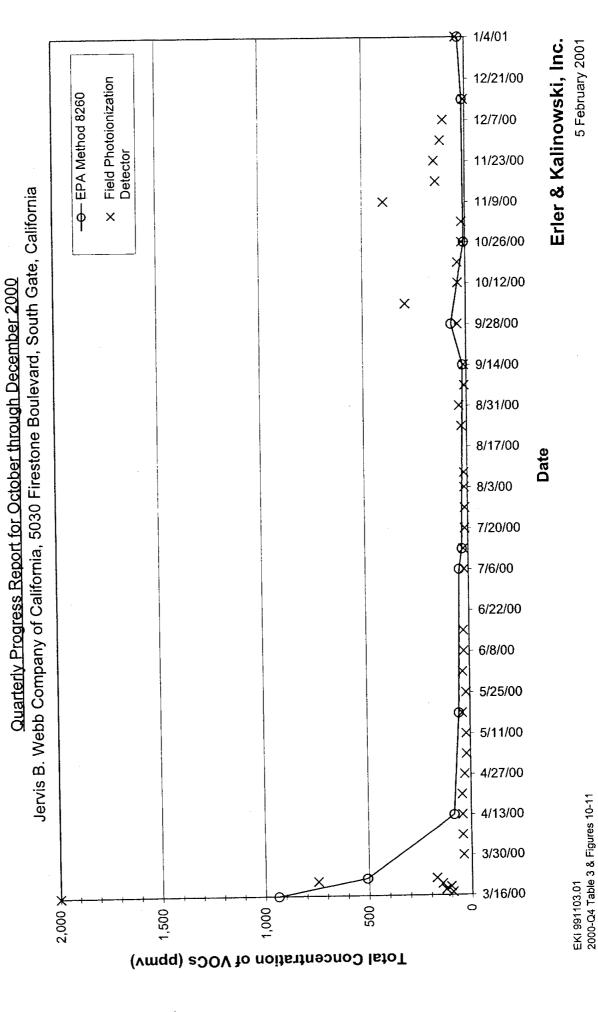


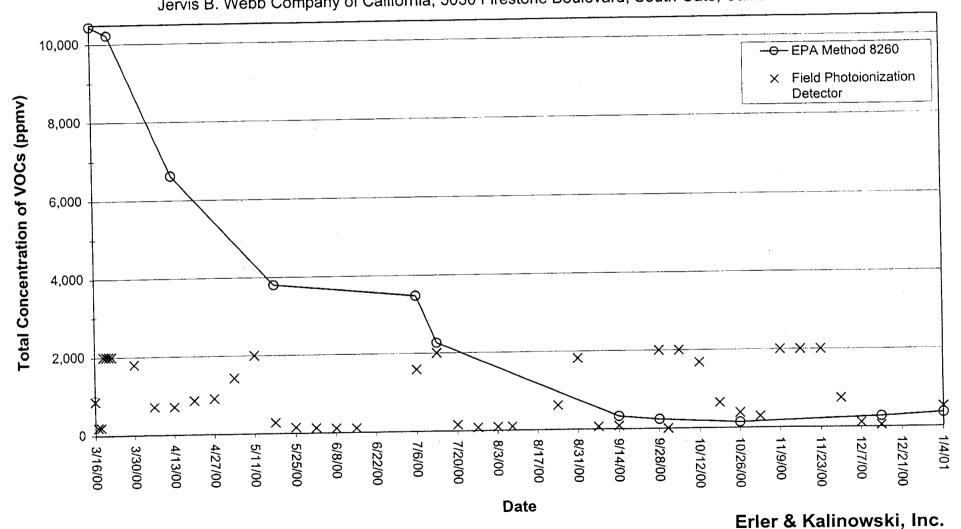
FIGURE 10b

Total Concentrations of VOCs versus Time:

Extraction Well SVE-1

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



001225

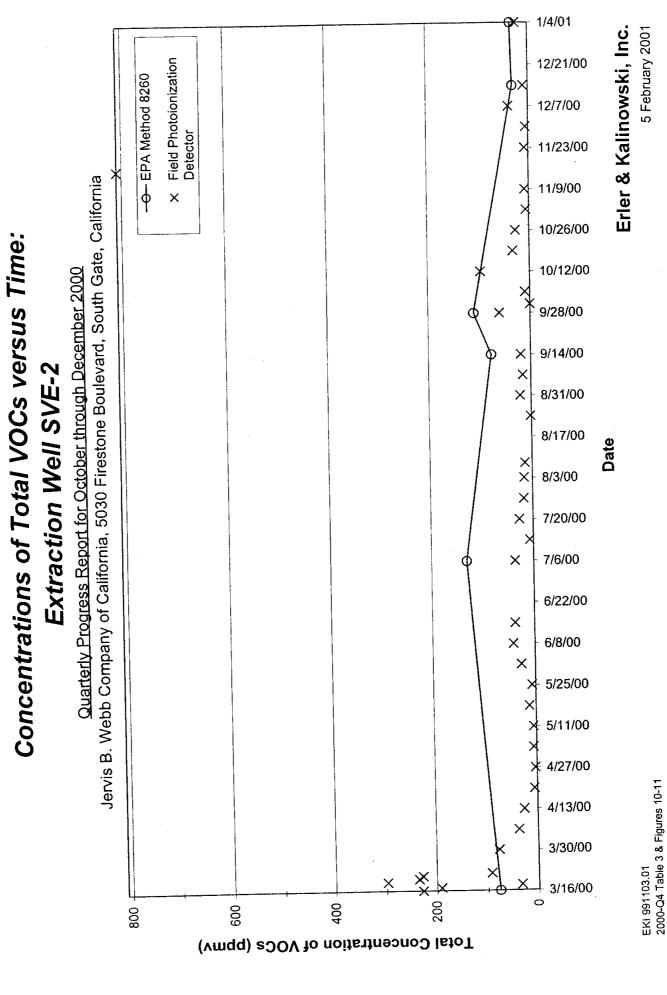


FIGURE 10c

FIGURE 10d Concentrations of Total VOCs versus Time: Extraction Well SVE-3

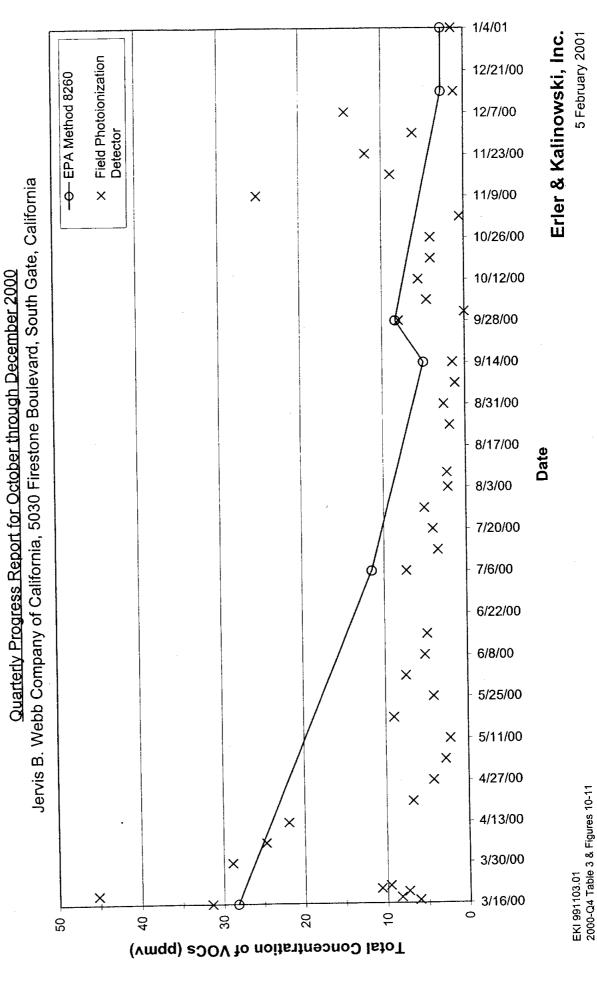
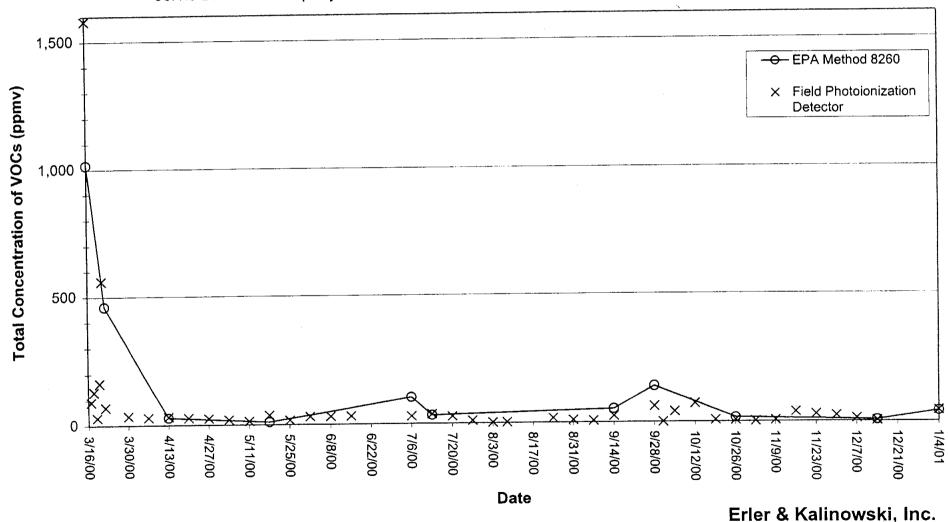


FIGURE 10e Concentrations of Total VOCs versus Time: Extraction Well SVE-D1

Quarterly Progress Report for October through December 2000

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

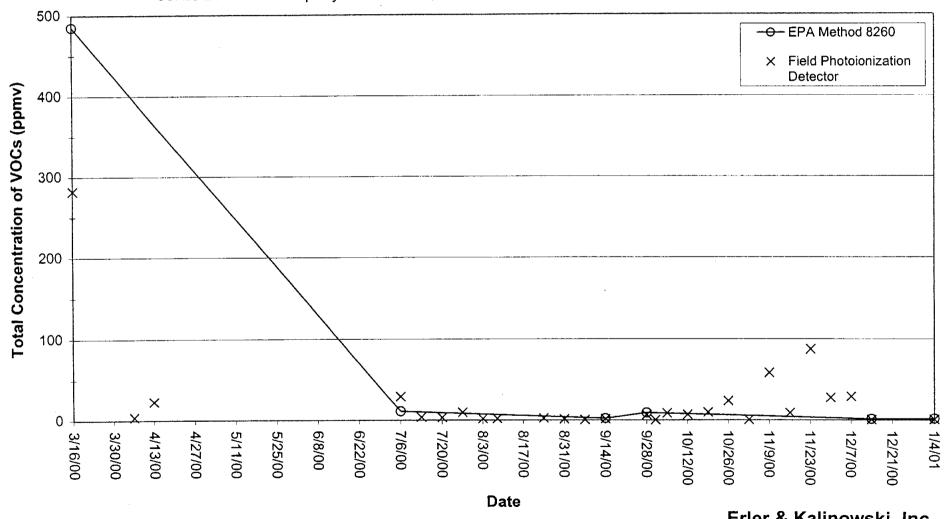


001228

FIGURE 10f

Concentrations of Total VOCs versus Time: Extraction Well VMP-D1

Quarterly Progress Report for October through December 2000 Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

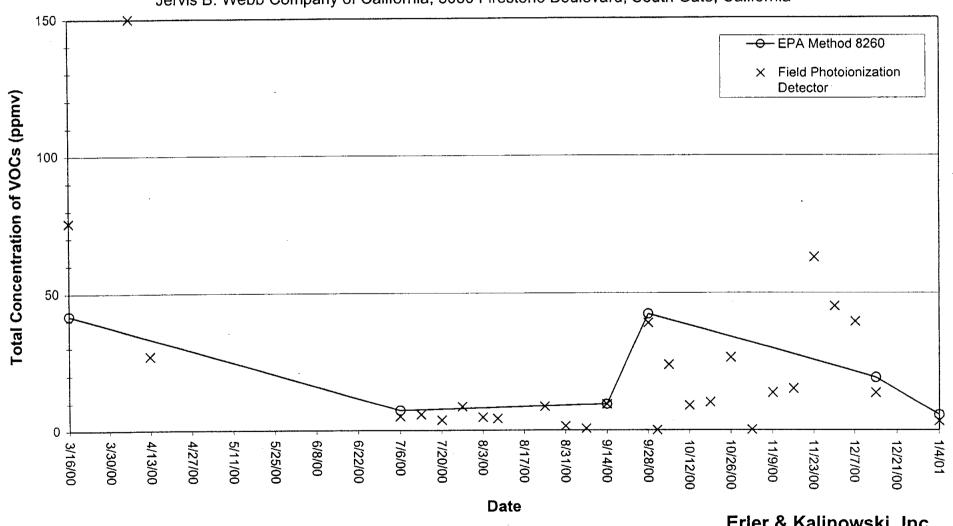


EKI 991103.01 2000-Q4 Table 3 & Figures 10-11 Erler & Kalinowski, Inc.

5 February 2001

FIGURE 10g Concentrations of Total VOCs versus Time: Extraction Well VMP-D2

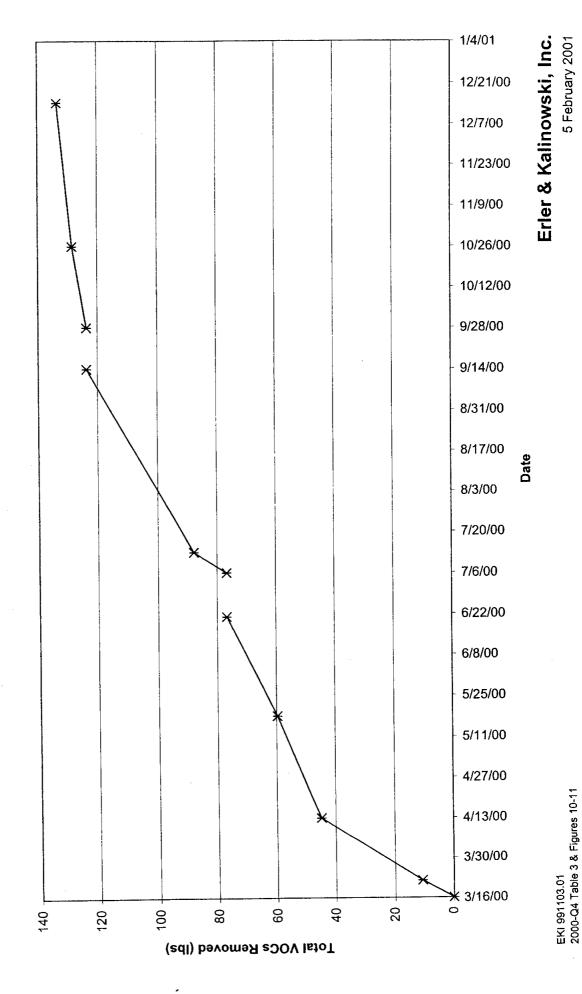
Quarterly Progress Report for October through December 2000 Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



001230

FIGURE 11
Cumulative VOC Removal

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California Quarterly Progress Report for October through December 2000



APPENDIX A

Groundwater Purge and Water Quality Monitoring Forms for Groundwater Sampling

= 02; 6-in.=1.44 TIME: /4;	Water Column (f 24.16 gals/ft.	*	Multiplier (below) O.64 RUMENT	= 15. CALIBRA Field meas	L: BJA .5 ×3=	Standard
= 02; 6-in.=1.44 TIME: /4;	Water Column (f 24.16 gals/ft.	INST Instrum Conduct pH pH Turbidit	Multiplier (below) O.64 RUMENT ment	= 15. CALIBRA Field meas	·5 ×3= TION	(gallons) (gallons) Standard measure
02; 6-in.=1.44	Column (f 24.16 gais/ft.	INST Instrum Conduc pH pH Turbidit	(below) O.64 RUMENT ment	CALIBRA Field meas	TION	(gallons) (97) Standard measure
02; 6-in.=1.44	24.16 gais/ft.	INST Instrum Conduc pH pH Turbidit	(below) O.64 RUMENT ment	CALIBRA Field meas	TION	(gallons) (gallons) (gallons) Standard measure
02; 6-in.=1.44	24.16 gais/ft.	INST Instrum Conduc pH pH Turbidit	RUMENT	CALIBRA Field meas	TION	Standar measur
02; 6-in.=1.44	gals/ft.	INST Instrum Conduc pH pH Turbidit	RUMENT	CALIBRA Field meas	TION	Standar measur
- TIME: / 4:		Instrum Conduc pH pH Turbidit	<u>nent</u> ⊐ivity	Field meas	<u>sure</u>	measur
- гіме: /4:	18	Instrum Conduc pH pH Turbidit	<u>nent</u> ⊐ivity	Field meas	<u>sure</u>	measur
- гіме: /4:	18	Conduc pH pH Turbidil	ativity	meas	<u>sure</u>	measuri
- гіме: /4:	18	Conduc pH pH Turbidil	ativity			_
- гіме: /4:	18	pH pH Turbidil	1	See	MW-4	7
- гіме: /4:	18	pH pH Turbidil	1	See	MW-4	7
	18	pH Turbidit	: 'Y	See	MW-4	7
	18	pH Turbidit	: '	SEE	MW-4	1
	18	Turbidil	: ' y	l		1
	18		t y			
		Tempe				
			rature			
		Depth F	Probe			
		<u> </u>		سع د د د د		
6 14'.02	-14:07	14:09	14:12	14:15	14:17	
	7.0		25-		110	
20	30	35	40	45	48	
	105	100	401	10 a	100	
3 69.9	07,2	67.5	64.1	00.7	64.2	
1 7 29	221	220	718	316	716	
1 7.21	7.21	7.20	7.10	7.10	7.17	
0 3190	U 210	u uun	4.580	4.810	4 280	
7,100	1,210	4,110	.,,50=	17 01 0	1,000	
1 168	1.06	0 88	0.85	047	0.71	
1 1.00	10	0.00	0.00	[[
E						
-	 					
				<u></u>		
.						···
ected	Containers	& Preservatio	Ω.	Analyses Re	quested	
^	ን ሂ ሀ ዎን ልለ	I VAA .	.14/	\$7	260	
و مر	- 10 101	2 0011.	7/ //CI			
	3 69.9 1 7.29 0 3,180 1 1.68 E	3 69.9 69.5 1 7.29 7.21 0 3,180 4,210 1 1.68 1.06 E acted Containers	3 69.9 69.5 69.5 1 7.29 7.21 7.20 0 3,180 4,210 4,440 1 1.68 1.06 0.88 E Containers & Preservation	3 69.9 69.5 69.5 69.1 1 7.29 7.21 7.20 7.18 0 3,180 4,210 4,440 4,580 1 1.68 1.06 0.88 0.85 E Containers & Preservation	3 69.9 69.5 69.5 69.1 68.9 1 7.29 7.21 7.20 7.18 7.16 0 3,180 4,210 4,440 4,580 4,810 1 1.68 1.06 0.88 0.85 0.47 E Containers & Preservation Analyses Re	3 69.9 69.5 69.5 69.1 68.9 69.2 1 7.29 7.21 7.20 7.18 7.16 7.15 0 3,180 4,210 4,440 4,580 4,810 4,880 1 1.68 1.06 0.88 0.85 0.47 0.71 E Containers & Preservation Analyses Requested

DATE: 12/5/00 PROJECT NAME: WEBB PERSONNEL: BJA PROJECT NUMBER: 991103.01 WELL NUMBER: MW-Z WELL VOLUME CALCULATION: Depth of Multiplier Depth to Water Casing Vol. Water (ft.) Column (ft.) (below) Well (ft.) (gallons) 44.51 69.55 25.04 0.64 = 16.0 x3= Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft. INSTRUMENT CALIBRATION No. of bailers prior to start of purge: -Standard Instrument measure <u>measure</u> PURGE METHOD: 2" GRUND FOS Conductivity PURGE DEPTH: 65 ρН SEE MW-4 рH END TIME: 11:25 START TIME: 9149 Turbidity Temperature 53 TOTAL GALLONS PURGED: Depth Probe Time 11:25 10.34 10:09 10:24 11:06 10:16 10:43 10:56 Volume Purged (gallons) 53 40 20 25 35 45 15 30 Temperature (degrees F)or C) 72.7 72.2 71.8 72.0 72.9 72.2 72.9 72.4 pH (units) 7.19 7.19 7.20 7.28 7.21 7.20 7.19 7.20 Specific Conductivity (uS/cm) 3,130 3,710 3,130 2,720 2,880 3,050 2,800 3,010 Turbidity/Color (NTU) 4.33 5.35 7.62 349 300 119 99.1 31.1 Ogor NOME Depth to Water (ft below TOC) during purge Number of Casing Volumes removed Purge Rate (gallons/minute) 0.5 0.8 Analyses Requested Containers & Preservation Time Collected COMMENTS/ Field I.D. 8260 2×40 ML VOAS SAMPLES: 11:30 MW-2 W/ HCI

DATE: 12/5/00 PROJECT NAME: WEBB PROJECT NUMBER: 99/103.01 PERSONNEL: BJA WELL NUMBER: MW-3 WELL VOLUME CALCULATION: Water Multiplier Depth of Depth to Casing Vol Well (ft.) Water (ft.) Column (ft.) (below) (gallons) 69.93 45.77 0.64 =15.5 ×3= (47 24.16 Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft. INSTRUMENT CALIBRATION Field No. of bailers prior to start of purge: Standard Instrument measure measure PURGE METHOD: 2" GRUNDFOS Conductivity PURGE DEPTH: 45 pΗ 5EE MW-4 οН END TIME: 12:20 Turbidity START TIME: 11:47 Temperature 50 Depth Probe TOTAL GALLONS PURGED: Time 12:09 12:12 11:55 12:00 12:16 12:06 12:20 Voiume Purged (gallons) 35 40 45 50 30 10 20 remperature (degrees F)or C) 68.8 68.7 69.0 68.5 68.6 69.1 68.7 pH (units) 7.32 7.32 7.31 7.33 7.41 7.38 7.34 Specific Conductivity (uS/cm) 2,240 2,300 2,370 2,410 1,650 1,300 2,130 Turbidity/Color (NTU) 1.48 3.50 2.44 86.3 10.6 4.91 1.82 Odor NONE Depth to Water (it below TOC) during purge Number of Casing Volumes removed Purge Rate (gailons/minute) 1.5 Analyses Requested Containers & Preservation COMMENTS/ Field I.D. Time Collected 8260 2×40 ML VOA WI HCI SAMPLES: 12:25 MW-3 MW-3-DUP 12:30 RINSATE BLANK 12:40 RINGATE WATER 12:45

3.01 Ito (ft.) 71 =0.64; 5-in.=1.02;	. =	Water Column (f 23.35 gals/ft.	ft.)		TE: 12/9	ری :	Casing Vo
l: to (ft.) 7 =0.64; 5-in.=1.02;	. =	Water Column (f 23.35	ft.)	Multiplier (below)			Casing Vo
(ft.) ? =0.64; 5-in.=1.02;		Column (f 23.35		(below)	ี = เช	a ×	(gallon
7 1 =0.64; 5-in.=1.02;		23.35		•	ี = 1ช	a ×	
=0.64; 5-in.=1.02;			•	. 0.64	์ = 1ข	a x	2-11
	υ-11 1 ξ				• 1.	7 ~	3=(45)
ge: 🝎			LINI	STRUMENT	CALIDDAT	TON	
ge: -			11147	21 KOMEMI		ION	
					Field		Standa
			Inst	rument	meas	ure	measu
FOS	•		}				
			Con	ductivity	2,06	0	2,060
			}	•	•		
	_		ľ				7.0
			ĮPH			=	4.01
END TIN	1E: 9:1	3	Turt	oidity	10.	3	10.0
			Tem	perature			
49			Dep	th Probe			
	10.00	T	T			· · · · ·	
8:55	14:02	9:06	9:08	1 9:10	1		
20	30	38	42	45			
70.7	69.4	69.1	69.2	- 69.2		· · · · · · · · · · · · · · · · · · ·	
	<u> </u>		<u> </u>	_			
10.11	0.19		0.13	0. (8			_
3,770	3,740	3,730	3,750	3,750			
6.73	2.93	2.92	1.51	1.64			
NONE							
			<u> </u>			·	
					1		
M.5 -							
Time Collecte	<u></u> d	Containers (& Preserva	ation	Analyses Rec	uested	
-		2740 M	n VOF		8260	,	ı
	9:55 20 70.7 6.79 3,770 6.73 None	49 8:55 9:02 20 30 70.7 69.4 6.79 6.93 3,770 3,740 6.73 2.93 NONE	8:55 9:02 9:06 20 30 38 70.7 69.4 69.1 6.79 6.93 6.98 3,770 3,740 3,730 6.73 2.93 2.92 NONE Time Collected Containers 9:20 2x40 A	49 8:55 9:02 9:06 9:08 20 30 38 42 70.7 69.4 69.1 69.2 6.79 6.93 6.98 6.95 3,770 3,740 3,730 3,750 6.73 2.93 2.92 1.51 None M.5 Time Collected Containers & Preserval	END TIME: 9:13 49 8:55 9:02 9:06 9:08 9:10 20 30 38 42 45 70.7 69.4 69.1 69.2 69.2 6.79 6.93 6.98 6.95 6.98 3,770 3,740 3,730 3,750 3,750 6.73 2.93 2.92 1.51 1.64 NONE Time Collected 9:20 Containers & Preservation 2x40 ML VOA	END TIME: 9:13 49 8:55 9:02 9:06 9:08 9:10 20 30 38 42 45 70.7 69.4 69.1 69.2 69.2 6.79 6.93 6.98 6.95 6.98 3,770 3,740 3,730 3,750 3,750 6.73 2.93 2.92 1.51 1.64 NONE Time Collected 9:20 2x40 Ne VOA PH 4.0 7.0 4.0 Turbidity Temperature Depth Probe 10.2	END TIME: 9:13 PH Turbidity Temperature Depth Probe 8:55 9:02 9:06 9:08 9:10 20 30 38 42 45 70.7 69.4 69.1 69.2 69.2 6.79 6.93 6.98 6.95 6.98 3,770 3,740 3,730 3,750 3,750 6.73 2.93 2.92 1.51 1.64 NOME Time Collected 9:20 2×40 ML VOA PH 4.0] Turbidity 10.3 Temperature Depth Probe 10.3 Temperature Depth Probe Analyses Requested 8260

WATER QUALITY MONITORIN	Grokivi								vski, inc
PROJECT NAME: WEBB						DA	TE: 12/9	5/00	
PROJECT NUMBER: 99110		WELL	NUMBER:	ML	j -	5 PE	RSONNEL	BJA	
WELL VOLUME CALCULATION	:					-			
Depth of Depth			Water			Multiplier			Casing Vo
Well (ft.) Water			Column (f			(below)			(gallons
68.85 - 46.	.16	=	22.60	?	*	0.64	= 14.	5 x3=	(UU)
Mult. for casing diam. = 2-in.=0.16; 4-in.:	=0.64; 5-in.=1.02;	6-in.=1.44 g	gals/ft.						
				I	NST	RUMENT	CALIBRAT	ION	
No. of bailers prior to start of pur	ge: 🗢						Field		Standard
				<u> </u>	nstrun	nent	measu	ıre	measure
PURGE METHOD: 2" GRE	1.100-	•							
Z GIZ	MDFOS				ondu	-tivitv			
DUDGE DEDTIL									
PURGE DEPTH: 64		_		ľ	H 		· 4.4		Ī
				1	Н	,	BEE M	W-4	l
START TIME: 12:56	END TIM	1E: (3:	22	T	urbidit	У			•
·				T	етре	rature			•
TOTAL GALLONS PURGED:	46		_	D	epth F	Probe			
Time	102	12100	121.00	13.	سيد ا	10110	12:22		
	13:03	13:08	13:13	15:	15	13:18	13:22		
Voiume Purged (gallons)	10	20	30	35	5	40	45		
Temperature (degrees For C)		20	100	1 /		10	<u> </u>		
	70.8	69.8	69.4	69.	<u>ኛ</u>	69.7	69.5		
pH (units)									
	7.23	7.17	7.17	7.16	6	7.17	7.15		
Specific Conductivity (uS/cm)	3 090	4060	4,210	110	60	4 70 0	4210		
Wales (NITTIN	3,980	7,000	7,40	4,0	70	4,280	1, 510		
Turbidity/Color (NTU)	6.49	2.80	1.51	22	2	1.44	1.53		[
Odor	0.17	2.80	(1	6.6		(• (احروا		
	NONE								
Depth to Water (ft below TOC)									
during purge									
Number of Casing						1	Ì		
Volumes removed									
Purge Rate (gallons/minute)	~2								
0014151170/	<u></u>		Cantainass	2 Droce	- I	 •	Analyses Req	uested	
COMMENTS/ Field I.D.	Time Collecte	- -	Containers			- ,			
SAMPLES: MW-5	13:25		2×40 m	n VC	A.	v/HC1	82	60	
									

APPENDIX B

Laboratory Reports and Chain-of-Custody Forms for Groundwater Sampling

ORANGE COAST ANALYTICAL, INC.



3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067 4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

LABORATORY REPORT FORM

Laboratory Name: ORANGE COAST ANALYTICAL, INC.

Address:

3002 Dow Suite 532 Tustin, CA 92780

Telephone:

(714) 832-0064

Laboratory Certification

(ELAP) No.:

<u>1416</u>

Expiration Date:

2001

Laboratory Director's Name (Print):

Mark Noorani

Client:

Erler & Kalinowski, Inc.

Project No.:

991103.01

Project Name:

<u>Webb</u>

Laboratory Reference: EKI 11916

Analytical Method: EPA 8260

Date Sampled:

12/05/00

Date Received:

12/05/00

Date Reported:

12/18/00

Sample Matrix:

<u>Water</u>

Chain of Custody Received:

Laboratory Director's Signature:

ANALYTICAL TEST RESULTS 8260 Reporting Unit: ug/l

DATE ANA			12/09/00	12/09/00	12/09/00	12/09/00
DILUTION	FACTOR		1	200	20	20
LAB SAMI	PLE I.D.		MB1209	00120229	00120230	00120231
CLIENT S	AMPLE I.D.			MW-1	MW-2	MW-3
COMPOUND		MDL	MB1209			
Acetone		2.0	<2.0	<400	<40	<40
Benzene		0.5	<0.5	<100	<10	<10
Bromodichloromethane		0.5	<0.5	<100	<10	<10
Bromoform		0.5	<0.5	<100	· <10	<10
Bromomethane		1.0	<1.0	<200	<20	<20
2-Butanone		1.0	<1.0	<200	<20	<20
Carbon Disulfide		0.5	<0.5	<100	<10	<10
Carbon Tetrachloride		0.5	<0.5	<100	<10	<10
Chlorobenzene		0.5	<0.5	<100	<10	<10
Chlorodibromomethane		0.5	<0.5	<100	<10	<10
Chloroethane		0.5	<0.5	<100	<10	<10
2-Chloroethyl vinyl ether	•	1.0	<1.0	<200	<20	<20
Chloroform		0.5	<0.5	<100	<10	<10
Chloromethane		0.5	<0.5	<100	<10	<10
1,1-Dichloroethane		0.5	<0.5	<100	<10	<10
1,2-Dichloroethane		0.5	<0.5	<100	<10	<10
1,1-Dichloroethene		0.5	<0.5	<100	<10	<10
cis-1,2-Dichloroethene		0.5	<0.5	<100	50	200
trans-1,2-Dichloroethene	•	0.5	<0.5	<100	<10	<10
1,2-Dichloropropane		0.5	<0.5	<100	<10	<10
cis-1,3-Dichloropropene		0.5	<0.5	<100	<10	<10
trans-1,3-Dichloroproper	ne	0.5	<0.5	<100	<10	<10
Ethylbenzene		0.5	<0.5	<100	<10	<10
2-Hexanone		1.0	<1.0	<200	<20	<20
Methylene chloride		2.5	<2.5	<500	<50	<50
4-Methyl-2-pentanone		1.0	<1.0	<200	<20	<20
Styrene		0.5	<0.5	<100	<10	<10
1,1,2,2-Tetrachloroethan	e	0.5	<0.5	<100	<10	<10
Tetrachloroethene	_ ,,,,,,,,,	0.5	<0.5	<100	<10	<10
Toluene		0.5	<0.5	<100	<10	<10
1,1,1-Trichloroethane		0.5	<0.5	<100	<10	<10
1,1,2-Trichloroethane		0.5	<0.5	<100	<10	<10
Trichloroethene		0.5	<0.5	30,000	2,300	2,400
Trichlorofluoromethane		0.5	<0.5	<100	<10	<10
Vinyl acetate		1.0	<1.0	<200	<20	<20
Vinyl Chloride		0.5	<0.5	<100	<10	<10
Total Xylenes		0.5	<0.5	<100	<10	<10
SURROGATE	SPK	ACP%	MB			
RECOVERY	CONC		%RC			
Dibromofluoromethane	50	80-120%	103	105	105	106
Toluene-d8	50	81-132%	103	105	104	102
4-Bromofluorobenzene	50	83-132%	107	110	111	112

ANALYTICAL TEST RESULTS 8260 Reporting Unit: ug/l

DATE ANA	LYZED		12/09/00	12/16/00	12/09/00	12/09/00
DILUTION	FACTOR		1	50	20	1
LAB SAMI	PLE I.D.		00120232	00120233	00120234	00120235
CLIENT SA	MPLE I.D.		MW-4	MW-5	MW-3-DUP	Rinsate Blank
COMPOUND		MDL				
Acetone	· · · · · · · · · · · · · · · · · · ·	2.0	<2.0	<100	<40	<2.0
Benzene		0.5	<2.0	<100	<10	<0.5
Bromodichloromethane		0.5	<0,5	<25	<10	<0.5
Bromoform		0.5	<0.5	<25	<10	<0.5
Bromomethane		1.0	<1.0	<20	<20	<1.0
2-Butanone		1.0	<1.0	<20	<20	<1.0
Carbon Disulfide		0.5	<0.5	<25	<10	<0.5
Carbon Tetrachloride	 -	0.5	<0.5	<25	<10	<0.5
Chlorobenzene	·	0.5	<0.5	<25	<10	<0.5
Chlorodibromomethane	· · · · · · · · · · · · · · · · · · ·	0.5	<0.5	<25	<10	<0.5
Chloroethane	··· · · · · · · · · · · · · · · · · ·	0.5	<0.5	<25	<10	<0.5
2-Chloroethyl vinyl ether		1.0	<1.0	<20	<20	<1.0
Chloroform		0.5	<0.5	<25	<10	<0.5
Chloromethane		0.5	<0.5	<25	<10	<0.5
1,1-Dichloroethane	0.5	<0.5	<25	20	<0.5	
1,2-Dichloroethane	0.5	<0.5	<25	<10	<0.5	
1,1-Dichloroethene	0.5	<0.5	<25	<10	<0.5	
cis-1,2-Dichloroethene		0.5	<0.5	190	210	<0.5
trans-1,2-Dichloroethene		0.5	<0.5	<25	<10	<0.5
1,2-Dichloropropane		0.5	<0.5	<25	<10	<0.5
cis-1,3-Dichloropropene		0.5	<0.5	<25	<10	<0.5
trans-1,3-Dichloroproper	ie	0.5	<0.5	<25	<10	<0.5
Ethylbenzene		0.5	<0.5	<25	<10	<0.5
2-Hexanone		1.0	<1.0	<50	<20	<0.5
Methylene chloride		2.5	<2.5	<125	<50	<2.5
4-Methyl-2-pentanone		1.0	<1.0	<50	<20	<1.0
Styrene		0.5	<0.5	<25	<10	<0.5
1,1,2,2-Tetrachloroethan	e	0.5	<0.5	<25	<10	<0.5
Tetrachloroethene		0.5	<0.5	<25	<10	<0.5
Toluene		0.5	<0.5	<25	<10	<0.5
1,1,1-Trichloroethane		0.5	<0.5	<25	<10	<0.5
1,1,2-Trichloroethane		0.5	<0.5	<25	<10	<0.5
Trichloroethene		0.5	<0.5	4,700	2,500	<0.5
Trichlorofluoromethane		0.5	<0.5	<25	<10	<0.5
Vinyl acetate		1.0	<1.0	<50	<20	<1.0
Vinyl Chloride		0.5	<0.5	<25	<10	<0.5
Total Xylenes		0.5	<0.5	<25	<10	<0.5
Total Agreement			· · · · · · · · · · · · · · · · · · ·	 -	······································	
SURROGATE SPK		ACP%				
RECOVERY	CONC					
Dibromoficeromethers	50	80-120%	100	114	110	112
Dibromofluoromethane	50		109 101	114 127	110	
Toluene-d8		81-132%			105	102
4-Bromofluorobenzene	50	83-132%	113	96	111	111

8260 QA / QC REPORT Reporting Unit: μg/l

1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date Performed: 12/09/00 LAB Sample 1. D.: 00120232 Laboratory Reference: EKI 11916

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	30.0	X + 8	: (^	11.34		1 4 2	1000	000000	7 . ¢.
									1415
1,1-Dichloroethene	0	20	21	22	105	110	5	61-145	14
Benzene	0.0	20	22	22	110	110	0	76-127	11
Trichloroethene	0	20	19	20	95	100	5	71-120	14
Toluene	0.0	20	21	22	105	110	5	76-125	13
Chlorobenzene	0.0	20	19	19	95	95	0	75-130	13

R1 = Result of Laboratory Sample I.D.

SPK CONC = Spiking Concentration (≤5 X PQL); PQL = Practical Quantitation Limit.

MS = Matrix Spike Result

MSD = Matrix Spike Duplicate Result

%MS = Percent Recovery of MS: {(MS-R1)/SP} X 100.

%MSD = Percent Recovery of MSD: {(MSD-R1)/SP} X 100.

RPD = Relative Percent Difference: {(MS - MSD)/(MS + MSD)} X 100 X 2

ACP%MS(MSD) = Acceptable Range of Percent.

ACP RPD = Acceptable Relative Percent Difference

2. Laboratory Quality Control check sample

Date Performed: 12/09/00

LAB Sample 1. D.: 8254A,55,56,57,58,59,60B,

Company of the Compan	ing page 1	Section 1	The state of the s	
trans-1,2-Dichloroethene	50	54	108	80 -120
1,1,1-Trichloroethane	50	47	94	80 -120
1,2-Dichloroethane	50	59	118	80 -120
Tetrachloroethene	50	45	90	80 -120
Styrene	50	44	88	80 -120

ANALYST: NAHID AMERI DATE: 12/18/00

An..., Jis L... ues. ... Id C..... n of Liste..., Rec. ... I

ORANGE COAST ANALYTICAL, INC.

3002 Dow. Suite 532

4620 E. Elwood, Suite 4

Lab Jou No:	
Lab ood itt.	
Page of _	
. 490	

Tustin, CA 92780 (714) 832-0064, Fax (714)	832-00	67	Phoenix, 7 (480) 736	AZ 8504 -0960 F	10 Fax (480)	736-09	970			RED TA			Lange 15 miles
CUSTOMER INFORMATION		Salar II	PROJECT IN	57 1 N. 80	-					7	//	//	
COMPANY: ERIER + KALINOWSKI INC.	PROJ	IECT NAME:	EBB						1	/ /			/ / / /
SEND REPORT TO: BRIAN ANCHARD	NUM	BER: 9911C	3.01								/ /	/ /	
ADDRESS: 3250 OCEAN PARK BUD	i	ATION:							/ ,	/ /			
SUITE 385		RESS: 5230	FIRES	TONE	BLU	<u> </u>			/ /		/ ,	/ /	′ / /
Samo MONICA CA 90409	;	5007	H GA-	FE, CI	<u> </u>			7 0/	/5	V	/ /		
PHONE: (310) 314-8755 FAX: (310) 314-881	50 SAW	PLED BY: と ふ	A	Partition Control		मुक्तासीर-भगाव र	17/	7 0/	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			/ /	
SAMPLE-ID	NO. OF CONTAINERS	SAMPLE DATE	SAMPLE		CONTAINER	PRES.		/		1			REMARKS/PRECAUTIONS
MW-1	2	12/5/00	14:20	W	40ML	HCI						_	2 WEEK TURNAROUND
MW.2			11:30				+++					_	
MW-3			12:25		-		111						
MW-4			9:20	 		-	4-{-		+	-		-	
MW-5			13:25	 		**	+				-		
MW-3-DUP			12:30	_	 -	┼}-			_	-			
RINSATE BLANK	1		12:40	_	 		4						12
RINSATE WATER	4	*	12:45	+	4	4			4	ļ			HOLD
					-					 			2 Run FOR 8260 1F
									_	-			ANY DETECTIONS IN
													RINSATE BLANK
													(CALL EXI FIRST)
Total No. of Samples:		Met	hod of Ship	ment: (Course	72							
Relinquished By: Date/Time:		Red	ceived By:		<u></u>	Date/Tin	ne:			Re	portin	ıg For	mat: (check)
M/2 12/5/00	14:5	55								_ t	NORN	ا AL	S.D. HMMD
Relinquished By: Date/Time:			ceived By:		-	Date/Tin	ne:			ı	RWQ(CB .	OTHER
Relinquished By: Date/Time:		Red	seived For L	ab By:	\bigcirc	Date/Tin		, 2:	5>n		•	-	rity: (check)

C

APPENDIX C

Laboratory Reports and Chain-of-Custody Forms for Soil Vapor Sampling



Air Quality Laboratory
A Division of Columbia Analytical Services, Inc.
An Employee Owned Company

RECEIVED

JAN 3 1 2001

LABORATORY REPORT

ERLER & KALINOWSKI, INC. SANTA MONICA OFFICE

Client:

ERLER & KALINOWSKI, INC.

Date of Report:

01/22/01

Address:

3250 Ocean Park Blvd., Suite 385

Date Received:

01/04/01

Santa Monica, CA 90405

PAI Project No:

P2100026

Contact:

Mr. Brian Auchard

Purchase Order:

Verbal

Client Project ID: WEBB #961025.03

Twelve (12) Tedlar Bag Samples labeled:

"SVE-1"

"SVE-2"

"SVE-3"

"SVE-D1"

"VMP-1"

"VMP-2"

"VMP-D1"

"VMP-D2"

"SVE-D1-DUP"

"Blower Influent"

"Equip Blank 1"

"Equip Blank 2"

The samples were received at the laboratory under chain of custody on January 4, 2001. The samples were received intact. The dates of analyses are indicated on the attached data sheets.

Volatile Organic Compound Analysis

The samples were analyzed by combined gas chromatography/mass spectrometry (GC/MS) for volatile organic compounds. The analyses were performed according to the methodology outlined in EPA Method TO-14A. The method was modified for using Tedlar bags. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical system used was comprised of a Hewlett Packard Model 5972 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT_x-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data sheets.

Reviewed and Approved:

Cindy Yoon

Analytical Chemist

Reviewed and Approved:

Chris Parnell Senior Chemist



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: SVE-1

PAI Sample ID : P2100026-001

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.050 ml(s)

D.F. = 1.00

G . C . '	COMPONE	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	20	ND	9.7
75-01-4	Vinyl Chloride	ND	20	ND	7.8
74-83-9	Bromomethane	ND	20	ND	5.2
75-00-3	Chloroethane	ND	20	ND	7.6
67-64-1	Acetone	ND	20	ND	8.4
75-69-4	Trichlorofluoromethane	ND	20	ND	3.6
75-35-4	1,1-Dichloroethene	ND	20	ND	5.0
75-09-2	Methylene chloride	ND	20	ND	5.8
76-13-1	Trichlorotrifluoroethane	ND	20	ND	2.6
75-15-0	Carbon Disulfide	ND	20	ND	6.4
156-60-5	trans-1,2-Dichloroethene	ND	20	ND	5.0
75-34-3	1,1-Dichloroethane	ND	20	ND	4.9
1634-04-4	Methyl tert-Butyl Ether	ND	20	ND	5.5
108-05-4	Vinyl Acetate	ND	20	ND	5.7
78-93-3	2-Butanone (MEK)	ND	20	ND	6.8
156-59-2	cis-1,2-Dichloroethene	ND	20	ND	5.0
67-66-3	Chloroform	ND	20	ND	4.1
107-06-2	1,2-Dichloroethane	ND	20	ND	4.9
71-55-6	1,1,1-Trichloroethane	ND	20	ND	3.7
71-43-2	Benzene	ND	20	ND	6.3
56-23-5	Carbon Tetrachloride	ND	20	ND	3.2
78-87-5	1,2-Dichloropropane	ND	20	ND	4.3

TR = Detected Below Indicated Reporting Limit

Verified By:	RG	Date:	1181	01
			,	Page No

Performance Analytical Inc. Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: SVE-1

PAI Sample ID : P2100026-001

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 1/4

1/4/01

 $Instrument: HP 5972/Tekmar\ AUTO Can\ Elite$

Date Received:

1/4/01

Analyst: Cindy Yoon Matrix: Tedlar Bag Date Analyzed:

1/5/01

Volume(s) Analyzed:

0.050 ml(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	20	ND	3.0
79-01-6	Trichloroethene	1,900	20	350	3.7
10061-01-5	cis-1,3-Dichloropropene	ND	20	ND	4.4
108-10-1	4-Methyl-2-pentanone	ND	20	ND	4.9
10061-02-6	trans-1,3-Dichloropropene	ND	20	ND	4.4
79-00-5	1,1,2-Trichloroethane	ND	20	ND	3.7
108-88-3	Toluene	ND	20	ND	5.3
591-78-6	2-Hexanone	ND	20	. ND	4.9
124-48-1	Dibromochloromethane	ND	20	ND	2.3
106-93-4	1,2-Dibromoethane	ND	20	ND	2.6
127-18-4	Tetrachloroethene	37	20	5.5	3.0
108-90-7	Chlorobenzene	ND	20	ND	4.3
100-41-4	Ethylbenzene	ND	20	ND	4.6
1330-20-7	m- & p-Xylenes	ND	20	ND	4.6
75-25-2	Bromoform	ND	20	ND	1.9
100-42-5	Styrene	ND	20	ND	4.7
95-47-6	o-Xylene	ND	20	ND	4.6
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ND	2.9
541-73-1	1,3-Dichlorobenzene	ND	20	ND	3.3
106-46-7	1,4-Dichlorobenzene	ND	20	ND	3.3
95-50-1	1,2-Dichlorobenzene	ND	20	ND	3.3

TR = Detected Below Indicated Reporting Limit

Verified By:_	RG	Date:	1181	01
_				Page No.

Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: SVE-2

PAI Sample ID : P2100026-002

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon Matrix: Tedlar Bag

Date Analyzed:

1/5/01

Volume(s) Analyzed:

0.40 ml(s)

D.F. = 1.00

G.4.G.#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	2.5	ND	1.2
75-01-4	Vinyl Chloride	ND	2.5	ND	0.98
74-83-9	Bromomethane	ND	2.5	ND	0.64
75-00-3	Chloroethane	ND	2.5	ND	0.95
67-64-1	Acetone	ND	2.5	ND	1.1
75-69-4	Trichlorofluoromethane	ND	2.5	ND	0.45
75-35-4	1,1-Dichloroethene	ND	.2.5	ND	0.63
75-09-2	Methylene chloride	ND	2.5	ND	0.72
76-13-1	Trichlorotrifluoroethane	ND	2.5	ND	0.33
75-15-0	Carbon Disulfide	ND	2.5	ND	0.80
156-60-5	trans-1,2-Dichloroethene	ND	2.5	ND	0.63
75-34-3	1,1-Dichloroethane	ND	2.5	ND	0.62
1634-04-4	Methyl tert-Butyl Ether	ND	2.5	ND	0.69
108-05-4	Vinyl Acetate	ND	2.5	ND	0.71
78-93-3	2-Butanone (MEK)	ND	2.5	ND	0.85
156-59-2	cis-1,2-Dichloroethene	ND	2.5	ND	0.63
67-66-3	Chloroform	ND	2.5	ND	0.51
107-06-2	1,2-Dichloroethane	ND	2.5	ND	0.62
71-55-6	1,1,1-Trichloroethane	ND	2.5	ND	0.46
71-43-2	Benzene	ND	2.5	ND	0.78
56-23-5	Carbon Tetrachloride	ND	2.5	ND	0.40
78-87-5	1,2-Dichloropropane	ND	2.5	ND	0.54

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:

Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

: Erler & Kalinowski, Inc. Client

Client Sample ID: SVE-2

PAI Sample ID : P2100026-002

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.40 ml(s)

D.F. = 1.00

GAG!!	COMPOINT	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	2.5	ND	0.37
79-01-6	Trichloroethene	180	2.5	34	0.47
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	ND	0.55
108-10-1	4-Methyl-2-pentanone	ND	2.5	ND	0.61
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	ND	0.55
79-00-5	1,1,2-Trichloroethane	ND	2.5	ND	0.46
108-88-3	Toluene	ND	2.5	ND	0.66
591-78-6	2-Hexanone	ND	2.5	ND	0.61
124-48-1	Dibromochloromethane	ND	2.5	ND	0.29
106-93-4	1,2-Dibromoethane	ND	2.5	ND	0.33
127-18-4	Tetrachloroethene	4.4	2.5	0.65	0.37
108-90-7	Chlorobenzene	ND	2.5	ND	0.54
100-41-4	Ethylbenzene	ND	2.5	ND	0.58
1330-20-7	m- & p-Xylenes	ND	2.5	ND	0.58
75-25-2	Bromoform	ND	2.5	ND	0.24
100-42-5	Styrene	ND	2.5	ND	0.59
95-47-6	o-Xylene	ND	2.5	ND	0.58
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	ND	0.36
541-73-1	1,3-Dichlorobenzene	ND	2.5	ND	0.42
106-46-7	1,4-Dichlorobenzene	ND	2.5	ND	0.42
95-50-1	1,2-Dichlorobenzene	ND	2.5	ND	0.42

TR = Detected Below Indicated Reporting Limit

Verified By:	RG	Date:	118	01
•				Page No.:



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: SVE-3

PAI Sample ID : P2100026-003

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.0050 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT	•	LIMIT
		μg/m³	μg/m³	ppb	ppb
74-87-3	Chloromethane	ND	200	ND	97
75-01-4	Vinyl Chloride	ND	200	ND	78
74-83-9	Bromomethane	ND	200	ND	52
75-00-3	Chloroethane	ND	200	ND	76
67-64-1	Acetone	ND	200	ND	84
75-69-4	Trichlorofluoromethane	ND	200	ND	36
75-35-4	1,1-Dichloroethene	140 TR	200	34 TR	50
75-09-2	Methylene chloride	ND	200	ND	58
76-13-1	Trichlorotrifluoroethane	ND	200	ND	26
75-15-0	Carbon Disulfide	ND	200	ND	64
156-60-5	trans-1,2-Dichloroethene	ND	200	ND	50
75-34-3	1,1-Dichloroethane	ND	200	ND	49
1634-04-4	Methyl tert-Butyl Ether	ND	200	ND	55
108-05-4	Vinyl Acetate	ND	200	ND	57
78-93-3	2-Butanone (MEK)	ND	200	ND	68
156-59-2	cis-1,2-Dichloroethene	ND	200	ND	50
67-66-3	Chloroform	ND	200	ND	41
107-06-2	1,2-Dichloroethane	ND	200	ND	49
71-55-6	1,1,1-Trichloroethane	200 TR	200	36 TR	37
71-43-2	Benzene	ND	200	ND	63
56-23-5	Carbon Tetrachloride	ND	200	ND	32
78-87-5	1,2-Dichloropropane	ND	200	ND	43

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RU

00026VOA.RDI - Sample (3) 2665 Park Center Drive, Suite D. Simi Valley, California 93065 • Phone (805) 526-7161• Fax (805) 526-7270



PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: SVE-3

PAI Sample ID : P2100026-003

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.0050 Liter(s)

D.F. = 1.00

0.4.0.11	COMMONING	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppb	ppb
75-27-4	Bromodichloromethane	ND	200	ND	30
79-01-6	Trichloroethene	7,100	200	1,300	37
10061-01-5	cis-1,3-Dichloropropene	ND	200	ND	44
108-10-1	4-Methyl-2-pentanone	ND	200	ND	49
10061-02-6	trans-1,3-Dichloropropene	ND	200	ND	44
79-00-5	1,1,2-Trichloroethane	ND	200	ND	37
108-88-3	Toluene	ND	200	ND	53
591-78-6	2-Hexanone	ND	200	ND	49
124-48-1	Dibromochloromethane	ND	200	ND	23
106-93-4	1,2-Dibromoethane	ND	200	ND	26
127-18-4	Tetrachloroethene	9,500	200	1,400	30
108-90-7	Chlorobenzene	ND	200	ND	43
100-41-4	Ethylbenzene	ND	200	ND	46
1330-20-7	m- & p-Xylenes	ND	200	ND	46
75-25-2	Bromoform	ND	200	ND	19
100-42-5	Styrene	ND	200	ND	47
95-47-6	o-Xylene	ND	200	ND	46
79-34-5	1,1,2,2-Tetrachloroethane	ND	200	ND	29
541-73-1	1,3-Dichlorobenzene	ND	200	ND	33
106-46-7	1,4-Dichlorobenzene	ND	200	ND	33
95-50-1	1,2-Dichlorobenzene	ND	200	ND	33

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: Date:



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: SVE-D1 PAI Sample ID : P2100026-004

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon Matrix: Tedlar Bag

Date Analyzed:

1/5/01

Volume(s) Analyzed:

0.25 ml(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	<u> </u>	4.0		
	V 111 V 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ND		ND	1.9
75-01-4	Vinyl Chloride	ND	4.0	ND	1.6
74-83-9	Bromomethane	ND	4.0	ND	1.0
75-00-3	Chloroethane	ND	4.0	ND	1.5
67-64-1	Acetone	ND	4.0	ND	1.7
75-69-4	Trichlorofluoromethane	ND	4.0	ND	0.71
75-35-4	1,1-Dichloroethene	ND	4.0	ND	1.0
75-09-2	Methylene chloride	ND	4.0	ND	1.2
76-13-1	Trichlorotrifluoroethane	ND	4.0	ND	0.52
75-15-0	Carbon Disulfide	ND	4.0	ND	1.3
156-60-5	trans-1,2-Dichloroethene	ND	4.0	ND	1.0
75-34-3	1,1-Dichloroethane	ND	4.0	ND	0.99
1634-04-4	Methyl tert-Butyl Ether	ND	4.0	ND	1.1
108-05-4	Vinyl Acetate	ND	4.0	ND	1.1
78-93-3	2-Butanone (MEK)	ND	4.0	ND	1.4
156-59-2	cis-1,2-Dichloroethene	ND	4.0	ND	1.0
67-66-3	Chloroform	ND	4.0	ND	0.82
107-06-2	1,2-Dichloroethane	ND	4.0	ND	0.99
71-55-6	1,1,1-Trichloroethane	ND	4.0	ND	0.73
71-43-2	Benzene	ND	4.0	ND	1.3
56-23-5	Carbon Tetrachloride	ND	4.0	ND	0.64
78-87-5	1,2-Dichloropropane	ND	4.0	ND	0.87

TR = Detected Below Indicated Reporting Limit



PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : SVE-D1
PAI Sample ID : P2100026-004

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst : Cindy Yoon Matrix : Tedlar Bag Date Analyzed:

1/5/01

Volume(s) Analyzed:

0.25 ml(s)

D.F. = 1.00

G.1.0.11	COMPOUNT	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	4.0	ND	0.60
79-01-6	Trichloroethene	220	4.0	41	0.74
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	ND	0.88
108-10-1	4-Methyl-2-pentanone	ND	4.0	ND	0.98
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	ND	0.88
79-00-5	1,1,2-Trichloroethane	ND	4.0	ND	0.73
108-88-3	Toluene	ND	4.0	ND	1.1
591-78-6	2-Hexanone	ND	4.0	ND	0.98
124-48-1	Dibromochloromethane	ND	4.0	ND	0.47
106-93-4	1,2-Dibromoethane	ND	4.0	ND	0.52
127-18-4	Tetrachloroethene	2.2 TR	4.0	0.32 TR	0.59
108-90-7	Chlorobenzene	ND	4.0	ND	0.87
100-41-4	Ethylbenzene	ND	4.0	ND	0.92
1330-20-7	m- & p-Xylenes	ND	4.0	ND	0.92
75-25-2	Bromoform	ND	4.0	ND	0.39
100-42-5	Styrene	ND	4.0	ND	0.94
95-47-6	o-Xylene	ND	4.0	ND	0.92
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	ND	0.58
541-73-1	1,3-Dichlorobenzene	ND	4.0	ND	0.67
106-46-7	1,4-Dichlorobenzene	ND	4.0	ND	0.67
95-50-1	1,2-Dichlorobenzene	ND	4.0	ND	0.67

TR = Detected Below Indicated Reporting Limit

Verified By:	RG	Date:	1118/01
			Dana Mai



PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: SVE-D1

PAI Sample ID: P2100026-004DUP

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.25 ml(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	4.0	ND	1.9
75-01-4	Vinyl Chloride	ND	4.0	ND	1.6
74-83-9	Bromomethane	ND	4.0	ND	1.0
75-00-3	Chloroethane	ND	4.0	ND	1.5
67-64-1	Acetone	ND	4.0	ND	1.7
75-69-4	Trichlorofluoromethane	ND	4.0	ND	0.71
75-35-4	1,1-Dichloroethene	ND	4.0	ND	1.0
75-09-2	Methylene chloride	ND	4.0	ND	1.2
76-13-1	Trichlorotrifluoroethane	ND	4.0	ND	0.52
75-15-0	Carbon Disulfide	ND	4.0	ND	1.3
156-60-5	trans-1,2-Dichloroethene	ND	4.0	ND	1.0
75-34-3	1,1-Dichloroethane	ND	4.0	ND	0.99
1634-04-4	Methyl tert-Butyl Ether	ND	4.0	ND	1.1
108-05-4	Vinyl Acetate	ND	4.0	ND	1.1
78-93-3	2-Butanone (MEK)	ND	4.0	ND	1.4
156-59-2	cis-1,2-Dichloroethene	ND	4.0	ND	1.0
67-66-3	Chloroform	ND	4.0	ND	0.82
107-06-2	1,2-Dichloroethane	ND	4.0	ND	0.99
71-55-6	1,1,1-Trichloroethane	ND	4.0	ND	0.73
71-43-2	Benzene	ND	4.0	ND	1.3
56-23-5	Carbon Tetrachloride	ND	4.0	ND	0.64
78-87-5	1,2-Dichloropropane	ND	4.0	ND	0.87

TR = Detected Below Indicated Reporting Limit

Verified By:	RG	Date:	1/18/01
			Page No.:



PAGE 2 OF 2

: Erler & Kalinowski, Inc.

Client Sample ID: SVE-D1

Client

PAI Sample ID: P2100026-004DUP

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.25 ml(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	. /3			
		mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	4.0	ND	0.60
79-01-6	Trichloroethene	220	4.0	41	0.74
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	ND	0.88
108-10-1	4-Methyl-2-pentanone	ND	4.0	ND	0.98
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	ND	0.88
79-00-5	1,1,2-Trichloroethane	ND	4.0	ND	0.73
108-88-3	Toluene	ND	4.0	ND	1.1
591-78-6	2-Hexanone	ND	4.0	ND	0.98
124-48-1	Dibromochloromethane	ND	4.0	ND	0.47
106-93-4	1,2-Dibromoethane	ND	4.0	ND	0.52
127-18-4	Tetrachloroethene	2.2 TR	4.0	0.32 TR	0.59
108-90-7	Chlorobenzene	ND	4.0	ND	0.87
100-41-4	Ethylbenzene	ND	4.0	ND	0.92
1330-20-7	m- & p-Xylenes	ND	4.0	ND	0.92
75-25-2	Bromoform	ND	4.0	ND	0.39
100-42-5	Styrene	ND	4.0	ND	0.94
95-47-6	o-Xylene	ND	4.0	ND	0.92
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	ND	0.58
541-73-1	1,3-Dichlorobenzene	ND	4.0	ND	0.67
106-46-7	1,4-Dichlorobenzene	ND	4.0	ND	0.67
95-50-1	1,2-Dichlorobenzene	ND	4.0	ND	0.67

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:_

00026VOA.RD1 - Dup (4)

2665 Park Center Drive, Suite D. Simi Valley, California 93065 • Phone (805) 526-7161 • Fax (805) 526-7270

Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: VMP-1

PAI Sample ID : P2100026-005

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Date Received:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Analyzed:

1/5/01

Analyst: Cindy Yoon Matrix: Tedlar Bag

Volume(s) Analyzed:

0.010 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMICOND	μg/m³	μg/m³	ppb	ppb
74-87-3	Chloromethane	ND	100	ND	48
75-01-4	Vinyl Chloride	ND	100	ND	39
74-83-9	Bromomethane	ND	100	ND	26
75-00-3	Chloroethane	ND	100	ND	38
67-64-1	Acetone	ND	100	ND	42
75-69-4	Trichlorofluoromethane	ND	100	ND	18
75-35-4	1,1-Dichloroethene	ND	100	ND	25
75-09-2	Methylene chloride	ND	100	ND	29
76-13-1	Trichlorotrifluoroethane	ND	100	ND	13
75-15-0	Carbon Disulfide	ND	100	ND	32
156-60-5	trans-1,2-Dichloroethene	ND	100	ND	25
75-34-3	1,1-Dichloroethane	ND	100	ND	25
1634-04-4	Methyl tert-Butyl Ether	ND	100	ND	28
108-05-4	Vinyl Acetate	ND	100	ND	28
78-93-3	2-Butanone (MEK)	ND	100	ND	34
156-59-2	cis-1,2-Dichloroethene	ND	100	ND	25
67-66-3	Chloroform	ND	100	ND	20
107-06-2	1,2-Dichloroethane	ND	100	ND	25
71-55-6	1,1,1-Trichloroethane	ND	100	ND	18
71-43-2	Benzene	ND	100	ND	31
56-23-5	Carbon Tetrachloride	ND	100	ND	16
78-87-5	1,2-Dichloropropane	ND	100	ND	22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RG



PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: VMP-1

PAI Sample ID : P2100026-005

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received: 1/4/01 1/5/01

Analyst: Cindy Yoon Matrix: Tedlar Bag

Date Analyzed:

Volume(s) Analyzed:

0.010 Liter(s)

D.F. = 1.00

G . G .!!		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND	į	LIMIT		LIMIT
		μg/m³	μg/m³	ppb	ppb
75-27-4	Bromodichloromethane	ND	100	ND	15
79-01-6	Trichloroethene	5,000	100	930	19
10061-01-5	cis-1,3-Dichloropropene	ND	100	ND	22
108-10-1	4-Methyl-2-pentanone	ND	100	ND	24
10061-02-6	trans-1,3-Dichloropropene	ND	100	ND	22
79-00-5	1,1,2-Trichloroethane	ND	100	ND	18
108-88-3	Toluene	84 TR	100	22 TR	27
591-78-6	2-Hexanone	ND	100	ND	24
124-48-1	Dibromochloromethane	ND	100	ND	12
106-93-4	1,2-Dibromoethane	ND	100	ND	13
127-18-4	Tetrachloroethene	670	100	99	15
108-90-7	Chlorobenzene	ND	100	ND	22
100-41-4	Ethylbenzene	ND	100	ND	23
1330-20-7	m- & p-Xylenes	140	100	32	23
75-25-2	Bromoform	ND	100	ND	9.7
100-42-5	Styrene	ND	100	ND	23
95-47-6	o-Xylene	60 TR	100	14 TR	23
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ND	15
541-73-1	1,3-Dichlorobenzene	ND	100	ND	17
106-46-7	1,4-Dichlorobenzene	ND	100	ND	17
95-50-1	1,2-Dichlorobenzene	ND	100	ND	17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:

Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: VMP-2

PAI Sample ID : P2100026-006

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.040 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppb	ppb
74-87-3	Chloromethane	ND	25	ND	12
75-01-4	Vinyl Chloride	ND	25	ND	9.8
74-83-9	Bromomethane	ND	25	ND	6.4
75-00-3	Chloroethane	ND	25	ND	9.5
67-64-1	Acetone	35	25	15 .	11
75-69-4	Trichlorofluoromethane	ND	25	ND	4.5
75-35-4	1,1-Dichloroethene	ND	25	ND	6.3
75-09-2	Methylene chloride	ND	25	ND	7.2
76-13-1	Trichlorotrifluoroethane	ND	25	ND	3.3
75-15-0	Carbon Disulfide	ND	25	ND	8.0
156-60-5	trans-1,2-Dichloroethene	ND	25	ND	6.3
75-34-3	1,1-Dichloroethane	ND	25	ND	6.2
1634-04-4	Methyl tert-Butyl Ether	13 TR	25	3.7 TR	6.9
108-05-4	Vinyl Acetate	ND	25	ND	7.1
78-93-3	2-Butanone (MEK)	ND	25	ND	8.5
156-59-2	cis-1,2-Dichloroethene	15 TR	25	3.8 TR	6.3
67-66-3	Chloroform	ND	25	ND	5.1
107-06-2	1,2-Dichloroethane	ND	25	ND	6.2
71-55-6	1,1,1-Trichloroethane	ND	25	ND	4.6
71-43-2	Benzene	ND	25	ND	7.8
56-23-5	Carbon Tetrachloride	ND	25	ND	4.0
78-87-5	1,2-Dichloropropane	ND	25	ND	5.4

TR = Detected Below Indicated Reporting Limit

Verified By: RG	Date:	1118/01
		D N



PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: VMP-2

PAI Sample ID : P2100026-006

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon Matrix: Tedlar Bag

Date Analyzed:

1/5/01

Volume(s) Analyzed:

0.040 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
		μg/m³	μg/m³	ppb	ppb
75-27-4	Bromodichloromethane	ND	25	ND	3.7
79-01-6	Trichloroethene	720	25	130	4.7
10061-01-5	cis-1,3-Dichloropropene	ND	25	ND	5.5
108-10-1	4-Methyl-2-pentanone	ND	25	ND	6.1
10061-02-6	trans-1,3-Dichloropropene	ND	25	ND	5.5
79-00-5	1,1,2-Trichloroethane	ND	25	ND	4.6
108-88-3	Toluene	56	25	15	6.6
591-78-6	2-Hexanone	ND	25	ND	6.1
124-48-1	Dibromochloromethane	ND	25	ND	2.9
106-93-4	1,2-Dibromoethane	ND	25	ND	3.3
127-18-4	Tetrachloroethene	190	25	29	3.7
108-90-7	Chlorobenzene	ND	25	ND	5.4
100-41-4	Ethylbenzene	14 TR	25	3.2 TR	5.8
1330-20-7	m- & p-Xylenes	60	25	14	5.8
75-25-2	Bromoform	ND	25	ND	2.4
100-42-5	Styrene	ND	25	ND	5.9
95-47-6	o-Xylene	25	25	5.8	5.8
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	ND	3.6
541-73-1	1,3-Dichlorobenzene	ND	25	ND	4.2
106-46-7	1,4-Dichlorobenzene	ND	25	ND	4.2
95-50-1	1,2-Dichlorobenzene	ND	25	ND	4.2

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : VMP-D1
PAI Sample ID : P2100026-007

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Sampled

1/4/01

Analyst: Cindy Yoon

Date Received:
Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.010 Liter(s)

D.F. = 1.00

GA G #	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND	, _	LIMIT	_	LIMIT
		μg/m³	μg/m³	ppb	ppb
74-87-3	Chloromethane	ND	100	ND	48
75-01-4	Vinyl Chloride	ND	100	ND	39
74-83-9	Bromomethane	ND	100	ND	26
75-00-3	Chloroethane	ND	100	ND	38
67-64-1	Acetone	ND	100	ND	42
75-69-4	Trichlorofluoromethane	ND	100	ND	18
75-35-4	1,1-Dichloroethene	ND	100	ND	25
75-09-2	Methylene chloride	ND	100	ND	29
76-13-1	Trichlorotrifluoroethane	ND	100	ND	13
75-15-0	Carbon Disulfide	ND	100	ND	32
156-60-5	trans-1,2-Dichloroethene	ND	100	ND	25
75-34-3	1,1-Dichloroethane	ND	100	ND	25
1634-04-4	Methyl tert-Butyl Ether	ND	100	ND	28
108-05-4	Vinyl Acetate	ND	100	ND	28
78-93-3	2-Butanone (MEK)	ND	100	ND	34
156-59-2	cis-1,2-Dichloroethene	ND	100	ND	25
67-66-3	Chloroform	ND	100	ND	20
107-06-2	1,2-Dichloroethane	ND	100	ND	25
71-55-6	1,1,1-Trichloroethane	ND	100	ND	18
71-43-2	Benzene	ND	100	ND	31 .
56-23-5	Carbon Tetrachloride	ND	100	ND	16
78-87-5	1,2-Dichloropropane	ND	100	ND	22

TR = Detected Below Indicated Reporting Limit

Verified By:	RU	Date:	11/8/01



An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: VMP-D1 PAI Sample ID : P2100026-007

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon Matrix: Tedlar Bag

Date Analyzed:

1/5/01

Volume(s) Analyzed:

0.010 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppb	ppb
75-27-4	Bromodichloromethane	ND	100	ND	15
79-01-6	Trichloroethene	8,300	100	1,600	19
10061-01-5	cis-1,3-Dichloropropene	ND	100	ND	22
108-10-1	4-Methyl-2-pentanone	ND	100 .	ND	24
10061-02-6	trans-1,3-Dichloropropene	ND	100	ND	22
79-00-5	1,1,2-Trichloroethane	ND	100	ND	18
108-88-3	Toluene	53 TR	100	14 TR	27
591-78-6	2-Hexanone	ND	100	ND	24
124-48-1	Dibromochloromethane	ND	100	ND	12
106-93-4	1,2-Dibromoethane	ND	100	ND	13
127-18-4	Tetrachloroethene	200	100	30	15
108-90-7	Chlorobenzene	ND	100	ND	22
100-41-4	Ethylbenzene	ND	100	ND	23
1330-20-7	m- & p-Xylenes	85 TR	100	20 TR	23
75-25-2	Bromoform	ND	100	ND	9.7
100-42-5	Styrene	ND	100	ND	23
95-47-6	o-Xylene	ND	100	ND	23
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ND	15
541-73-1	1,3-Dichlorobenzene	ND	100	ND	17
106-46-7	1,4-Dichlorobenzene	ND	100	ND	17
95-50-1	1,2-Dichlorobenzene	ND	100	ND	17

TR = Detected Below Indicated Reporting Limit

Verified By:	RG_	Date: 11801
		n N-



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID : VMP-D2

PAI Sample ID : P2100026-008

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.0040 Liter(s)

D.F. = 1.00

0.40.11	COMPAINT	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT	,	LIMIT
		μg/m³	μg/m³	ppb	ppb
74-87-3	Chloromethane	ND	250	ND	120
75-01-4	Vinyl Chloride	ND	250	ND	98
74-83-9	Bromomethane	ND	250	ND	64
75-00-3	Chloroethane	ND	250	ND	95
67-64-1	Acetone	ND	250	ND	110
75-69-4	Trichlorofluoromethane	ND	250	ND	45
75-35-4	1,1-Dichloroethene	270	250	68	63
75-09-2	Methylene chloride	ND	250	ND	72
76-13-1	Trichlorotrifluoroethane	ND	250	ND	33
75-15-0	Carbon Disulfide	ND	250	ND	80
156-60-5	trans-1,2-Dichloroethene	ND	250	ND	63
75-34-3	1,1-Dichloroethane	ND	250	ND	62
1634-04-4	Methyl tert-Butyl Ether	ND	250	ND	69
108-05-4	Vinyl Acetate	ND	250	ND	71
78-93-3	2-Butanone (MEK)	ND	250	ND	85
156-59-2	cis-1,2-Dichloroethene	ND	250	ND	63
67-66-3	Chloroform	ND	250	ND	51
107-06-2	1,2-Dichloroethane	ND	250	ND	62
71-55-6	1,1,1-Trichloroethane	ND	250	ND	46
71-43-2	Benzene	5,800	250	1,800	78
56-23-5	Carbon Tetrachloride	ND	250	ND	40
78-87-5	1,2-Dichloropropane	ND	250	ND	54

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:



PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: VMP-D2 PAI Sample ID : P2100026-008

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.0040 Liter(s)

D.F. = 1.00

0.40.11	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppb	ppb
75-27-4	Bromodichloromethane	ND	250	ND	37
79-01-6	Trichloroethene	16,000	250	3,000	47
10061-01-5	cis-1,3-Dichloropropene	ND	250	ND	55
108-10-1	4-Methyl-2-pentanone	ND	250	ND	61
10061-02-6	trans-1,3-Dichloropropene	ND	250	ND	55
79-00-5	1,1,2-Trichloroethane	ND	250	ND	46
108-88-3	Toluene	760	250	200	66
591-78-6	2-Hexanone	ND	250	ND	61
124-48-1	Dibromochloromethane	ND	250	ND	29
106-93-4	1,2-Dibromoethane	ND	250	ND	33
127-18-4	Tetrachloroethene	1,100	250	170	37
108-90-7	Chlorobenzene	ND	250	ND	54
100-41-4	Ethylbenzene	530	250	120	58
1330-20-7	m- & p-Xylenes	1,000	250	230	58
75-25-2	Bromoform	ND	250	ND	24
100-42-5	Styrene	ND	250	ND	59
95-47-6	o-Xylene	430	250	98	58
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	ND	36
541-73-1	1,3-Dichlorobenzene	ND	250	ND	42
106-46-7	1,4-Dichlorobenzene	ND	250	ND	42
95-50-1	1,2-Dichlorobenzene	ND	250	ND	42

TR = Detected Below Indicated Reporting Limit

Verified By:	RU	Date: 11801
		Page No:



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: SVE-D1-DUP

PAI Sample ID : P2100026-009

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.25 ml(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	4.0	ND	1.9
75-01-4	Vinyl Chloride	ND	4.0	ND	1.6
74-83-9	Bromomethane	ND	4.0	· ND	1.0
75-00-3	Chloroethane	ND	4.0	ND	1.5
67-64-1	Acetone	ND	4.0	ND	1.7
75-69-4	Trichlorofluoromethane	ND	4.0	ND	0.71
75-35-4	1,1-Dichloroethene	ND	4.0	ND	1.0
75-09-2	Methylene chloride	ND	4.0	ND	1.2
76-13-1	Trichlorotrifluoroethane	ND	4.0	ND	0.52
75-15-0	Carbon Disulfide	ND	4.0	ND	1.3
156-60-5	trans-1,2-Dichloroethene	ND	4.0	ND	1.0
75-34-3	1,1-Dichloroethane	ND	4.0	ND	0.99
1634-04-4	Methyl tert-Butyl Ether	ND	4.0	ND	1.1
108-05-4	Vinyl Acetate	ND	4.0	ND	1.1
78-93-3	2-Butanone (MEK)	ND	4.0	ND	1.4
156-59-2	cis-1,2-Dichloroethene	ND	4.0	ND	1.0
67-66-3	Chloroform	ND	4.0	ND	0.82
107-06-2	1,2-Dichloroethane	ND	4.0	ND	0.99
71-55-6	1,1,1-Trichloroethane	ND	4.0	ND	0.73
71-43-2	Benzene	ND	4.0	ND	1.3
56-23-5	Carbon Tetrachloride	ND	4.0	ND	0.64
78-87-5	1,2-Dichloropropane	ND	4.0	ND	0.87

TR = Detected Below Indicated Reporting Limit

Air Quality Laboratory A Division of Columbia Analytical Services. Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: SVE-D1-DUP PAI Sample ID : P2100026-009

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.25 ml(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	mg/m³	mg/m ³	ppm	ppm
75-27-4	Bromodichloromethane	ND	4.0	ND	0.60
79-01-6	Trichloroethene	240	4.0	45	0.74
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	ND	0.88
108-10-1	4-Methyl-2-pentanone	ND	4.0	ND	0.98
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	ND	0.88
79-00-5	1,1,2-Trichloroethane	ND	4.0	ND	0.73
108-88-3	Toluene	ND	4.0	ND	1.1
591-78-6	2-Hexanone	ND	4.0	ND	0.98
124-48-1	Dibromochloromethane	ND	4.0	ND	0.47
106-93-4	1,2-Dibromoethane	ND	4.0	ND	0.52
127-18-4	Tetrachloroethene	2.4 TR	4.0	0.35 TR	0.59
108-90-7	Chlorobenzene	ND	4.0	ND	0.87
100-41-4	Ethylbenzene	ND	4.0	ND	0.92
1330-20-7	m- & p-Xylenes	ND	4.0	ND	0.92
75-25-2	Bromoform	ND	4.0	ND	0.39
100-42-5	Styrene	ND	4.0	ND	0.94
95-47-6	o-Xylene	ND	4.0	ND	0.92
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	ND	0.58
541-73-1	1,3-Dichlorobenzene	ND	4.0	ND	0.67
106-46-7	1,4-Dichlorobenzene	ND	4.0	ND	0.67
95-50-1	1,2-Dichlorobenzene	ND	4.0	ND	0.67

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: K(5

Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: Blower Influent

PAI Sample ID : P2100026-010

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.40 ml(s)

D.F. = 1.00

G.10."	COLOND	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	2.5	ND	1.2
75-01-4	Vinyl Chloride	ND	2.5	ND	0.98
74-83-9	Bromomethane	ND	2.5	ND	0.64
75-00-3	Chloroethane	ND	2.5	ND	0.95
67-64-1	Acetone	ND	2.5	ND	1.1
75-69-4	Trichlorofluoromethane	ND	2.5	ND	0.45
75-35-4	1,1-Dichloroethene	ND	2.5	ND	0.63
75-09-2	Methylene chloride	ND	2.5	ND	0.72
76-13-1	Trichlorotrifluoroethane	ND	2.5	ND	0.33
75-15-0	Carbon Disulfide	ND	2.5	ND	0.80
156-60-5	trans-1,2-Dichloroethene	ND	2.5	ND	0.63
75-34-3	1,1-Dichloroethane	ND	2.5	ND	0.62
1634-04-4	Methyl tert-Butyl Ether	ND	2.5	ND	0.69
108-05-4	Vinyl Acetate	ND	2.5	ND	0.71
78-93-3	2-Butanone (MEK)	ND	2.5	ND	0.85
156-59-2	cis-1,2-Dichloroethene	ND	2.5	ND	0.63
67-66-3	Chloroform	2.0 TR	2.5	0.41 TR	0.51
107-06-2	1,2-Dichloroethane	ND	2.5	ND	0.62
71-55-6	1,1,1-Trichloroethane	ND	2.5	ND	0.46
71-43-2	Benzene	4.1	2.5	1.3	0.78
56-23-5	Carbon Tetrachloride	ND	2.5	ND	0.40
78-87-5	1,2-Dichloropropane	ND	2.5	ND	0.54

TR = Detected Below Indicated Reporting Limit

Verified By:	RG	Date:	1118/01
			Dana Ma



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: Blower Influent PAI Sample ID : P2100026-010

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon Matrix: Tedlar Bag

Date Analyzed:

1/5/01

Volume(s) Analyzed:

0.40 ml(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMICOND	mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	2.5	ND	0.37
79-01-6	Trichloroethene	160	2.5	30	0.47
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	ND	0.55
108-10-1	4-Methyl-2-pentanone	ND	2.5	ND	0.61
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	ND	0.55
79-00-5	1,1,2-Trichloroethane	ND	2.5	ND	0.46
108-88-3	Toluene	1.7 TR	2.5	0.45 TR	0.66
591-78-6	2-Hexanone	ND	2.5	ND	0.61
124-48-1	Dibromochloromethane	ND	2.5	ND	0.29
106-93-4	1,2-Dibromoethane	ND	2.5	ND	0.33
127-18-4	Tetrachloroethene	2.9	2.5	0.42	0.37
108-90-7	Chlorobenzene	ND	2.5	ND	0.54
100-41-4	Ethylbenzene	ND	2.5	ND	0.58
1330-20-7	m- & p-Xylenes	1.4 TR	2.5	0.32 TR	0.58
75-25-2	Bromoform	ND	2.5	ND	0.24
100-42-5	Styrene	ND	2.5	ND	0.59
95-47-6	o-Xylene	ND	2.5	ND	0.58
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	ND	0.36
541-73-1	1,3-Dichlorobenzene	ND	2.5	ND	0.42
106-46-7	1,4-Dichlorobenzene	ND	2.5	ND	0.42
95-50-1	1,2-Dichlorobenzene	ND	2.5	ND	0.42

TR = Detected Below Indicated Reporting Limit

Verified By:	RG	Date:	18	01
		•		



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID : Equip Blank 1

PAI Sample ID : P2100026-011

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.20 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppb	ppb
74-87-3	Chloromethane	ND	5.0	ND	2.4
75-01-4	Vinyl Chloride	3.3 TR	5.0	1.3 TR	2.0
74-83-9	Bromomethane	ND	5.0	ND	1.3
75-00-3	Chloroethane	ND	5.0	ND	1.9
67-64-1	Acetone	36	5.0	15	2.1
75-69-4	Trichlorofluoromethane	ND	5.0	ND	0.89
75-35-4	1,1-Dichloroethene	ND	5.0	ND	1.3
75-09-2	Methylene chloride	9.4	5.0	2.7	1.4
76-13-1	Trichlorotrifluoroethane	ND	5.0	ND	0.65
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ND	1.3
75-34-3	1,1-Dichloroethane	ND	5.0	ND	1.2
1634-04-4	Methyl tert-Butyl Ether	13	5.0	3.7	1.4
108-05-4	Vinyl Acetate	11	5.0	3.1	1.4
78-93-3	2-Butanone (MEK)	15	5.0	5.0	1.7
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ND	1.3
67-66-3	Chloroform	ND	5.0	ND	1.0
107-06-2	1,2-Dichloroethane	ND	5.0	ND	1.2
71-55-6	1,1,1-Trichloroethane	ND	5.0	ND	0.92
71-43-2	Benzene	6.1	5.0	1.9	1.6
56-23-5	Carbon Tetrachloride	ND	5.0	ND	0.80
78-87-5	1,2-Dichloropropane	ND	5.0	ND	1.1

TR = Detected Below Indicated Reporting Limit

Verified By:	RG	Date:	1/18/01	



PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID: Equip Blank 1 PAI Sample ID: P2100026-011

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled :

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.20 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppb	ppb
75-27-4	Bromodichloromethane	ND	5.0	ND	0.75
79-01-6	Trichloroethene	6.0	5.0	1.1	0.93
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ND	1.1
108-10-1	4-Methyl-2-pentanone	ND	5.0	ND	1.2
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ND	1.1
79-00-5	1,1,2-Trichloroethane	ND	5.0	ND	0.92
108-88-3	Toluene	68	5.0	18	1.3
591-78-6	2-Hexanone	ND	5.0	ND	1.2
124-48-1	Dibromochloromethane	ND	5.0	ND	0.59
106-93-4	1,2-Dibromoethane	ND	5.0	ND	0.65
127-18-4	Tetrachloroethene	ND	5.0	ND	0.74
108-90-7	Chlorobenzene	ND	5.0	ND	1.1
100-41-4	Ethylbenzene	15	5.0	3.5	1.2
1330-20-7	m- & p-Xylenes	67	5.0	15	1.2
75-25-2	Bromoform	ND	5.0	ND	0.48
100-42-5	Styrene	2.6 TR	5.0	0.61 TR	1.2
95-47-6	o-Xylene	27	5.0	6.3	1.2
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ND	0.73
541-73-1	1,3-Dichlorobenzene	ND	5.0	ND	0.83
106-46-7	1,4-Dichlorobenzene	ND	5.0	ND	0.83
95-50-1	1,2-Dichlorobenzene	ND	5.0	ND	0.83

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: RC Date: 11801

Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: Equip Blank 2 PAI Sample ID : P2100026-012

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst: Cindy Yoon

Date Analyzed:

1/5/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.20 Liter(s)

D.F. = 1.00

G. G. #	COLONDO	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppb	ppb
74-87-3	Chloromethane	ND	5.0	ND	2.4
75-01-4	Vinyl Chloride	ND	5.0	ND	2.0
74-83-9	Bromomethane	ND	5.0	ND	1.3
75-00-3	Chloroethane	ND	5.0	ND	1.9
67-64-1	Acetone	33	5.0	14	2.1
75-69-4	Trichlorofluoromethane	ND	5.0	ND	0.89
75-35-4	1,1-Dichloroethene	ND	5.0	ND	1.3
75-09-2	Methylene chloride	7.3	5.0	2.1	1.4
76-13-1	Trichlorotrifluoroethane	ND	5.0	ND	0.65
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ND	1.3
75-34-3	1,1-Dichloroethane	ND	5.0	ND	1.2
1634-04-4	Methyl tert-Butyl Ether	9.7	5.0	2.7	1.4
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4
78-93-3	2-Butanone (MEK)	4.6 TR	5.0	1.6 TR	1.7
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ND	1.3
67-66-3	Chloroform	ND	5.0	ND	1.0
107-06-2	1,2-Dichloroethane	ND	5.0	ND	1.2
71-55-6	1,1,1-Trichloroethane	ND	5.0	ND	0.92
71-43-2	Benzene	5.2	5.0	1.6	1.6
56-23-5	Carbon Tetrachloride	ND	5.0	ND	0.80
78-87-5	1,2-Dichloropropane	ND	5.0	ND	1.1

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:

00026VOA.RDI - Sample (12)
2665 Park Center Drive, Suite D. Simi Valley. California 93065 • Phone (805) 526-7161• Fax (805) 526-7270



PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : Equip Blank 2 PAI Sample ID : P2100026-012

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

1/4/01

Instrument: HP5972/Tekmar AUTOCan Elite

Date Received:

1/4/01

Analyst : Cindy Yoon

Date Analyzed:

1/5/01

Matrix : Tedlar Bag Volume(s) Analyzed :

0.20 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING
CAS#	COMPOUND	μg/m³	1	anh	LIMIT
		<u> </u>	μg/m³	ppb	ppb
75-27-4	Bromodichloromethane	ND	5.0	ND	0.75
79-01-6	Trichloroethene	46	5.0	8.5	0.93
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ND	1.1
108-10-1	4-Methyl-2-pentanone	ND	5.0	ND	1.2
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ND	1.1
79-00-5	1,1,2-Trichloroethane	ND	5.0	ND	0.92
108-88-3	Toluene	48	5.0	13	1.3
591-78-6	2-Hexanone	ND	5.0	ND	1.2
124-48-1	Dibromochloromethane	ND	5.0	ND	0.59
106-93-4	1,2-Dibromoethane	ND	5.0	ND	0.65
127-18-4	Tetrachloroethene	5.5	5.0	0.80	0.74
108-90-7	Chlorobenzene	ND	5.0	ND	1.1
100-41-4	Ethylbenzene	8.5	5.0	1.9	1.2
1330-20-7	m- & p-Xylenes	34	5.0	7.9	1.2
75-25-2	Bromoform	ND	5.0	ND	0.48
100-42-5	Styrene	ND	5.0	ND	1.2
95-47-6	o-Xylene	14	5.0	3.2	1.2
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ND	0.73
541-73-1	1,3-Dichlorobenzene	ND	5.0	ND	0.83
106-46-7	1,4-Dichlorobenzene	ND	5.0	ND	0.83
95-50-1	1,2-Dichlorobenzene	ND	5.0	ND	0.83

TR = Detected Below Indicated Reporting Limit

Verified By:	RG	Date:	1181	0	



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: Method Blank

PAI Sample ID:

P010105-MB

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

NA

Date Received:

NA

Instrument: HP5972/Tekmar AUTOCan Elite

Date Analyzed:

1/05/01

Analyst: Cindy Yoon Matrix: Tedlar Bag

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

CAS#	COMBOTAD	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppb	ppb
74-87-3	Chloromethane	ND	1.0	ND	0.48
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND	1.0	ND	0.38
67-64-1	Acetone	ND	1.0	ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone (MEK)	ND	1.0	ND	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:



PAGE 2 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID: Method Blank PAI Sample ID: P010105-MB

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

NA

Instrument: HP5972/Tekmar AUTOCan Elite

Analyst: Cindy Yoon

Date Received:

NA Date Analyzed: 1/05/01

Matrix: Tedlar Bag

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppb	ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	ND	1.0	ND	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
1330-20-7	m- & p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1,.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ŊD	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

00026VOA.RD1 - MBlank

2665 Park Center Drive, Suite D. Simi Valley, California 93065 • Phone (805) 526-7161• Fax (805) 526-7270

	•		CHAIN OF CUSTODY /	Symbre ymi	ALYSIS REQUEST	
Efler & Kal	lnowski, inc.	·		_	Analytical Laboratory: PERFORMANC	<u> </u>
Project Nu	mber: 961025.0	3		·	Date Sampled: 1/4/01	
Project Na	me: WEBB			<u>-</u>	Sampled By: BJA	
Source of	Samples: SVE	SYSTEM			REPORT RESULTS TO: BRIAN AUCHARE	<u> </u>
Location	5030 FIRESTO	ME BUD, S	SOUTH GATE	_	Phone Number: (310) 314-8855	
Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Humber)	Results Roquired Dy (Date/Time)
	SVE-1	VAPOR	1 × 5L TEDLAR	11:02	TO-14 ·	2 WEEKS
-2	SVE-Z			10:20		
-3	SVE-3			9:45		:
-4	SVE-DI			10:48		
-5	VMP-1			9:15		

9:31

9:57

10:08

10:50

5pecial Instructions:

VMP-Z

VMP-DI

VMP-DZ

SVE-DI-DUP

Relinquished By: Received By:					
Name / Signature / Affiliation	Date	Time	Name / Signature / Milliation		
Baim AVEHORD/ 2: Com /BKI	1/4/01	3:15	love Ha		
de la	, –		Vilorenens 1402 4:30pm.		

2/2

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Efler & Ka	linowski, Inc.		·		Analytical Laboratory: PERFORMANC	E
Project Nu	mber: 96/025.0	3			Date Sampled: 1/4/0(
Project Na	me: WEBB				Sampled By: BA	
Source of	Samples: SVE 3	YSTEM	·	· · ·	Report Results To: BRIAN AUCHARI	۵
Locations	5030 FIRESTO	NE BLUD,	SOUTH GATE	-	Phone Number: (310) 314-8855	
Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Method Number)	Results Required By (Date/Time)
- //	EQUIP BLANK 1	VAPOR	1×5L TEDLAR	8:45	TO-14 .	2 WEEKS
-12_	EQUIP BLANK 2			10:36		1
				·		:

Special Instructions:

Relinquished By:	·		Received By:		
Name / Signature / Affiliation	Date	Time	Name / Signature /	Affiliation	
BRION AUGHAROL Com /BRI	1/4/01	3.15	las lu		
Mar My			Vilodramen	1407 4:30	
			0 0		



Air Quality Laboratory
A Division of Columbia Analytical Services, Inc.
An Employee Owned Company



RECEIVED

JAN -8 2001

ERLER & KALINOWSKI 120. SANTA MONICA OFFICE

LABORATORY REPORT

Client:

ERLER & KALINOWSKI, INC.

Date of Report:

12/27/00

Address:

3250 Ocean Park Blvd., Suite 385

Date Received:

12/14/00

Santa Monica, CA 90405

PAI Project No:

P2003340

Contact:

Mr. Brian Auchard

Purchase Order:

Verbal

Client Project ID: WEBB #961025.03

Eight (8) Tedlar Bag Samples labeled:

"Blower Influent"

"SVE-1" "SVE-2" "

"SVE-3"

"SVE-D1"

"VMP-D1" "VMP-D2" "SVE-D1-DUP"

The samples were received at the laboratory under chain of custody on December 14, 2000. The samples were received intact. The client requested and received 8 day rush results. The dates of analyses are indicated on the attached data sheets.

Volatile Organic Compound Analysis

The samples were analyzed by combined gas chromatography/mass spectrometry (GC/MS) for volatile organic compounds. The analyses were performed according to the methodology outlined in EPA Method TO-14A. The method was modified for using Tedlar bags. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical system used was comprised of a Hewlett Packard Model 5973 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT_x-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data sheets.

Reviewed and Approved:

Cindy Yoon

Analytical Chemist

Reviewed and Approved:

Chris Parnell Senior Chemist



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Erler & Kalinowski, Inc. Client

Blower Influent Client Sample ID: PAI Sample ID: P2003340-001

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

2.50 ml(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	mg/m³	mg/m³	ppm.	ppm
74-87-3	Chloromethane	ND	0.40	ND	0.19
75-01-4	Vinyl Chloride	ND	0.40	ND	0.16
74-83-9	Bromomethane	ND	0.40	ND	0.10
75-00-3	Chloroethane	ND	0.40	. ND	0.15
67-64-1	Acetone	ND	0.40	ND	0.17
75-69-4	Trichlorofluoromethane	ND	0.40	ND	0.071
75-35-4	1,1-Dichloroethene	0.63	0.40	0.16	0.10
75-09-2	Methylene chloride	ND	0.40	. ND	0.12
76-13-1	Trichlorotrifluoroethane	ND	0.40	ND	0.052
75-15-0	Carbon Disulfide	ND	0.40	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	0.40	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.40	ND	0.10
1634-04-4	Methyl tert-Butyl Ether	ND	0.40	ND	0.11
108-05-4	Vinyl Acetate	ND	0.40	ND	0.11
78-93-3	2-Butanone	ND	0.40	ND	0.14
156-59-2	cis-1,2-Dichloroethene	ND	0.40	ND	0.10
67-66-3	Chloroform	ND	0.40	ND	0.082
107-06-2	1,2-Dichloroethane	ND	0.40	ND	0.10
71-55-6	1,1,1-Trichloroethane	ND	0.40	ND	0.073
71-43-2	Benzene	13	0.40	4.1	0.13
56-23-5	Carbon Tetrachloride	ND	0.40	ND	0.064
78-87-5	1,2-Dichloropropane	ND	0.40	ND	0.087

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Date: 12/26/00 Verified By:__ Page No.:

03340VOA.CY1 - I

2665 Park Center Drive, Suite D. Simi Valley, California 93065 • Phone (805) 526-7161• Fax (805) 526-7270



PAGE 2 OF 2

Client

Erler & Kalinowski, Inc.

Client Sample ID:

Blower Influent

PAI Sample ID:

P2003340-001

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

2.50 ml(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	0.40	ND	0.060
79-01-6	Trichloroethene	36	0.40	6.7	0.074
10061-01-5	cis-1,3-Dichloropropene	ND	0.40	ND	0.088
108-10-1	4-Methyl-2-pentanone	ND	0.40	ND	0.10
10061-02-6	trans-1,3-Dichloropropene	ND	0.40	ND	0.088
79-00-5	1,1,2-Trichloroethane	ND	0.40	ND	0.073
108-88-3	Toluene	1.8	0.40	0.47	0.11
591-78-6	2-Hexanone	ND	0.40	ND	0.10
124-48-1	Dibromochloromethane	ND	0.40	ND	0.047
106-93-4	1,2-Dibromoethane	ND	0.40	ND	0.052
127-18-4	Tetrachloroethene	9.5	0.40	1.4	0.059
108-90-7	Chlorobenzene	ND	0.40	ND	0.087
100-41-4	Ethylbenzene	0.68	0.40	0.16	0.092
1330-20-7	m- & p-Xylenes	2.2	0.40	0.50	0.092
75-25-2	Bromoform	ND	0.40	ND	0.039
100-42-5	Styrene	ND	0.40	ND	0.094
95-47-6	o-Xylene	1.3	0.40	0.29	0.092
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.40	ND	0.058
541-73-1	1,3-Dichlorobenzene	ND	0.40	ND	0.067
106-46-7	1,4-Dichlorobenzene	ND	0.40	ND	0.067
95-50-1	1,2-Dichlorobenzene	0.29 TR	0.40	0.048 TR	0.067

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Date: 12/26/00 Verified By: CR Page No.:

03340VOA.CYL - 1

2665 Park Center Drive, Suite D, Simi Valley, California 93065 • Phone (805) 526-7161• Fax (805) 526-7270



Air Quality Laboratory
A Division of Columbia Analytical Services. Inc.
An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Erler & Kalinowski, Inc.

Client Sample ID : SVE-1
PAI Sample ID : P2003340-002

THE Bumple 120 . X = 000

Client

Test Code: GC/MS Mod. EPA TO-14A

 $Instrument: HP 5973/Tekmar\ AUTOC an\ Elite$

Analyst: Cindy Yoon/Wade Henton

Matrix: Tedlar Bag

Date Sampled: 12/14/00

Date Received: 12/14/00

Date Analyzed: 12/15/00

Volume(s) Analyzed: 0.10 ml(s)

0.025 ml(s)

•

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
U115 "		mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	10	ND	4.8
75-01-4	Vinyl Chloride	ND	10	ND	3.9
74-83-9	Bromomethane	ND	10	ND	2.6
75-00-3	Chloroethane	ND	10	ND	3.8
67-64-1	Acetone	7.4 TR	10	3.1 TR	4.2
75-69-4	Trichlorofluoromethane	ND	10	ND	1.8
75-35-4	1,1-Dichloroethene	ND	10	ND	2.5
75-09-2	Methylene chloride	ND	10	ND	2.9
76-13-1	Trichlorotrifluoroethane	ND	10	ND	1.3
75-15-0	Carbon Disulfide	ND	10	ND	3.2
156-60-5	trans-1,2-Dichloroethene	ND	10	ND	2.5
75-34-3	1,1-Dichloroethane	ND	10	ND	2.5
1634-04-4	Methyl tert-Butyl Ether	ND	10	ND	2.8
108-05-4	Vinyl Acetate	ND	10	ND	2.8
78-93-3	2-Butanone	ND	10	ND	3.4
156-59-2	cis-1,2-Dichloroethene	ND	10	ND	2.5
67-66-3	Chloroform	ND	10	ND	2.0
107-06-2	1,2-Dichloroethane	ND	10	ND	2.5
71-55-6	1,1,1-Trichloroethane	ND	10	ND	1.8
71-43-2	Benzene	ND	10	ND	3.1
56-23-5	Carbon Tetrachloride	ND	10	ND	1.6
78-87-5	1,2-Dichloropropane	ND	10	ND	2.2

TR = Detected Below Indicated Reporting Limit

Verified By:	KR	Date:	12/26/00
			Page No.:



PAGE 2 OF 2

Client

Erler & Kalinowski, Inc.

Client Sample ID :

SVE-1

PAI Sample ID:

P2003340-002

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

0.10 ml(s)

Matrix: Tedlar Bag

Volume(s) Analyzed:

0.025 ml(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	10	ND	1.5
79-01-6	Trichloroethene	1,400	10	260	1.9
10061-01-5	cis-1,3-Dichloropropene	ND	10	ND	2.2
108-10-1	4-Methyl-2-pentanone	ND	10	ND	2.4
10061-02-6	trans-1,3-Dichloropropene	ND	10	ND	2.2
79-00-5	1,1,2-Trichloroethane	ND	10	ND	1.8
108-88-3	Toluene	16	10	4.3	2.7
591-78-6	2-Hexanone	ND	10	ND	2.4
124-48-1	Dibromochloromethane	ND	10	ND	1.2
106-93-4	1,2-Dibromoethane	ND	10	ND	1.3
127-18-4	Tetrachloroethene	55	10	8.1	1.5
108-90-7	Chlorobenzene	ND	10	ND	2.2
100-41-4	Ethylbenzene	ND	10	ND	2.3
1330-20-7	m- & p-Xylenes	ND	10	ND	2.3
75-25-2	Bromoform	ND	10	ND	0.97
100-42-5	Styrene	ND	10	ND	2.3
95-47-6	o-Xylene	ND	10	ND	2.3
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	ND	1.5
541-73-1	1,3-Dichlorobenzene	ND	10	ND	1.7
106-46-7	1,4-Dichlorobenzene	ND	10	ND	1.7
95-50-1	1,2-Dichlorobenzene	ND	10	ND	1.7

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Date: 12/26/00 KR Verified By: Page No.:



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID : SVE-2

PAI Sample ID : P2003340-003

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Date Received: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Analyst: Cindy Yoon/Wade Henton

Volume(s) Analyzed:

1.00 ml(s)

0.25 ml(s)

D.F. = 1.00

CAS #	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	1.0	ND	0.48
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND	1.0	ND	0.38
67-64-1	Acetone	0.95 TR	1.0	0.40 TR	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	ND	1.0	ND	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

KR Date:_ Verified By:_



PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : SVE-2

PAI Sample ID : P2003340-003

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix : Tedlar Bag Volume(s) Analyzed :

1.00 ml(s)

0.25 ml(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMICOND	mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	160	1.0	29	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	4.1	1.0	1.1	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	5.0	1.0	0.74	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
1330-20-7	m- & p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: KR Date: 12126100



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID : SVE-3

PAI Sample ID : P2003340-004

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Volume(s) Analyzed: 10.00 ml(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CA3#	COMICOND	mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	0.10	ND	0.048
75-01-4	Vinyl Chloride	ND	0.10	ND	0.039
74-83-9	Bromomethane	ND	0.10	ND	0.026
75-00-3	Chloroethane	ND	0.10	ND	0.038
67-64-1	Acetone	ND	0.10	ND	0.042
75-69-4	Trichlorofluoromethane	ND	0.10	ND	0.018
75-35-4	1,1-Dichloroethene	0.14	0.10	0.035	0.025
75-09-2	Methylene chloride	ND	0.10	ND	0.029
76-13-1	Trichlorotrifluoroethane	ND	0.10	ND	0.013
75-15-0	Carbon Disulfide	ND	0.10	ND	0.032
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025
75-34-3	1,1-Dichloroethane	ND	0.10	ND	0.025
1634-04-4	Methyl tert-Butyl Ether	0.11	0.10	0.031	0.028
108-05-4	Vinyl Acetate	ND	0.10	ND	0.028
78-93-3	2-Butanone	ND	0.10	ND	0.034
156-59-2	cis-1,2-Dichloroethene	ND	0.10	ND	0.025
67-66-3	Chloroform	ND	0.10	ND	0.020
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025
71-55-6	1,1,1-Trichloroethane	0.21	0.10	0.038	0.018
71-43-2	Benzene	ND	0.10	ND	0.031
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022

TR = Detected Below Indicated Reporting Limit

Verified By:	KR	Date:	12/26/00
·			Page No.:



PAGE 2 OF 2

Client

Erler & Kalinowski, Inc.

Client Sample ID :

SVE-3

PAI Sample ID:

P2003340-004

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

10.00 ml(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015
79-01-6	Trichloroethene	6.3	0.10	1.2	0.019
10061-01-5	cis-1,3-Dichloropropene	ND	0.10	ND	0.022
108-10-1	4-Methyl-2-pentanone	ND	0.10	ND	0.024
10061-02-6	trans-1,3-Dichloropropene	ND	0.10	ND	0.022
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018
108-88-3	Toluene	0.26	0.10	0.070	0.027
591-78-6	2-Hexanone	ND	0.10	ND	0.024
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013
127-18-4	Tetrachloroethene	9.3	0.10	1.4	0.015
108-90-7	Chlorobenzene	ND	0.10	ND	0.022
100-41-4	Ethylbenzene	ND	0.10	ND	0.023
1330-20-7	m- & p-Xylenes	ND	0.10	ND	0.023
75-25-2	Bromoform	ND	0.10	ND	0.010
100-42-5	Styrene	ND	0.10	ND	0.023
95-47-6	o-Xylene	ND	0.10	ND	0.023
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.015
541-73-1	1,3-Dichlorobenzene	ND	0.10	ND	0.017
106-46-7	1,4-Dichlorobenzene	ND	0.10	ND	0.017
95-50-1	1,2-Dichlorobenzene	ND	0.10	ND	0.017

TR = Detected Below Indicated Reporting Limit

Verified By:	KR.	Date:_	ıə	26/00
· -				Diame M.



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID :

SVE-D1

PAI Sample ID:

P2003340-005

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

5.00 ml(s)

D.F. = 1.00

6.64	COMPOUNT	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	mg/m³	mg/m³	ppm	ppm
			0.20	ND	0.10
74-87-3	Chloromethane	ND			
75-01-4	Vinyl Chloride	ND	0.20	ND	0.078
74-83-9	Bromomethane	ND	0.20	ND	0.052
75-00-3	Chloroethane	ND	0.20	ND	0.076
67-64-1	Acetone	ND	0.20	ND	0.084
75-69-4	Trichlorofluoromethane	ND	0.20	ND	0.036
75-35-4	1,1-Dichloroethene	ND	0.20	ND	0.050
75-09-2	Methylene chloride	ND	0.20	ND	0.058
76-13-1	Trichlorotrifluoroethane	ND	0.20	ND	0.026
75-15-0	Carbon Disulfide	ND	0.20	ND	0.064
156-60-5	trans-1,2-Dichloroethene	ND	0.20	ND	0.050
75-34-3	1,1-Dichloroethane	ND	0.20	ND	0.049
1634-04-4	Methyl tert-Butyl Ether	ND	0.20	ND	0.055
108-05-4	Vinyl Acetate	ND	0.20	ND	0.057
78-93-3	2-Butanone	ND	0.20	ND	0.068
156-59-2	cis-1,2-Dichloroethene	ND	0.20	ND	0.050
67-66-3	Chloroform	ND	0.20	ND	0.041
107-06-2	1,2-Dichloroethane	ND	0.20	ND	0.049
71-55-6	1,1,1-Trichloroethane	ND	0.20	ND	0.037
71-43-2	Benzene	8.3	0.20	2.6	0.063
56-23-5	Carbon Tetrachloride	ND	0.20	ND	0.032
78-87-5	1,2-Dichloropropane	ND	0.20	ND	0.043

TR = Detected Below Indicated Reporting Limit

Verified By:	KR	Date: \	2) Julion
,			Page N

Performance Analytical Inc. Air Quality Laboratory

A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client

Erler & Kalinowski, Inc.

Client Sample ID:

SVE-D1

PAI Sample ID:

P2003340-005

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

5.00 ml(s)

D.F. = 1.00

		RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND		l i		
		mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	0.20	ND	0.030
79-01-6	Trichloroethene	15	0.20	2.7	0.037
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ND	0.044
108-10-1	4-Methyl-2-pentanone	ND	0.20	ND	0.049
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ND _	0.044
79-00-5	1,1,2-Trichloroethane	ND	0.20	ND	0.037
108-88-3	Toluene	0.70	0.20	0.19	0.053
591-78-6	2-Hexanone	ND	0.20	ND	0.049
124-48-1	Dibromochloromethane	ND	0.20	ND	0.023
106-93-4	1,2-Dibromoethane	ND	0.20	ND	0.026
127-18-4	Tetrachloroethene	0.66	0.20	0.10	0.030
108-90-7	Chlorobenzene	ND	0.20	ND	0.043
100-41-4	Ethylbenzene	ND	0.20	ND	0.046
1330-20-7	m- & p-Xylenes	0.85	0.20	0.20	0.046
75-25-2	Bromoform	ND	0.20	ND	0.019
100-42-5	Styrene	ND	0.20	ND	0.047
95-47-6	o-Xylene	0.59	0.20	0.14	0.046
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ND	0.029
541-73-1	1,3-Dichlorobenzene	ND	0.20	ND	0.033
106-46-7	1,4-Dichlorobenzene	ND	0.20	ND	0.033
95-50-1	1,2-Dichlorobenzene	ND	0.20	ND	0.033

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

12/24/00 Date:_ Verified By: KR

03340VOA.CY1 - 5

2665 Park Center Drive, Suite D, Simi Valley, California 93065 • Phone (805) 526-7161• Fax (805) 526-7270

Perform Air Quality A Division of An Employee

Performance Analytical Inc.

Air Quality Laboratory
A Division of Columbia Analytical Services, Inc.
An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Erler & Kalinowski, Inc.

Client Sample ID : SVE-D1-DUP PAI Sample ID : P2003340-008

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix : Tedlar Bag

Volume(s) Analyzed:

5.00 ml(s)

D.F. = 1.00

0.0."	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	0.20	ND	0.10
75-01-4	Vinyl Chloride	ND	0.20	ND	0.078
	Bromomethane	ND	0.20	ND	0.052
74-83-9	Chloroethane	ND	0.20	ND	0.076
75-00-3		ND	0.20	ND	0.084
67-64-1	Acetone	ND ND	0.20	ND	0.036
75-69-4	Trichlorofluoromethane	 	0.20	ND	0.050
75-35-4	1,1-Dichloroethene	ND			0.058
75-09-2	Methylene chloride	ND	0.20	ND	
76-13-1	Trichlorotrifluoroethane	ND	0.20	ND_	0.026
75-15-0	Carbon Disulfide	ND	0.20	ND	0.064
156-60-5	trans-1,2-Dichloroethene	ND	0.20	ND	0.050
75-34-3	1,1-Dichloroethane	ND	0.20	ND	0.049
1634-04-4	Methyl tert-Butyl Ether	ND	0.20	ND	0.055
108-05-4	Vinyl Acetate	ND	0.20	ND	0.057
78-93-3	2-Butanone	ND	0.20	ND	0.068
156-59-2	cis-1,2-Dichloroethene	ND	0.20	ND	0.050
67-66-3	Chloroform	ND	0.20	ND	0.041
107-06-2	1,2-Dichloroethane	ND	0.20	ND	0.049
71-55-6	1,1,1-Trichloroethane	ND	0.20	ND	0.037
71-43-2	Benzene	8.3	0.20	2.6	0.063
56-23-5	Carbon Tetrachloride	ND	0.20	ND	0.032
78-87-5	1,2-Dichloropropane	ND	0.20	ND	0.043

TR = Detected Below Indicated Reporting Limit

Verified By:	KR.	Date: 1	2/26/00	<u>)</u>
· · · · · · · · · · · · · · · · · · ·			Page No	



PAGE 2 OF 2

Client

Erler & Kalinowski, Inc.

Client Sample ID:

SVE-D1-DUP

PAI Sample ID:

P2003340-008

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

5.00 ml(s)

D.F. = 1.00

G. G. #	COL MOLINID	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	0.20	ND	0.030
79-01-6	Trichloroethene	14	0.20	2.7	0.037
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ND	0.044
108-10-1	4-Methyl-2-pentanone	ND	0.20	ND	0.049
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ND	0.044
79-00-5	1,1,2-Trichloroethane	ND	0.20	ND	0.037
108-88-3	Toluene	0.67	0.20	0.18	0.053
591-78-6	2-Hexanone	ND	0.20	ND	0.049
124-48-1	Dibromochloromethane	ND	0.20	ND	0.023
106-93-4	1,2-Dibromoethane	ND	0.20	ND	0.026
127-18-4	Tetrachloroethene	0.63	0.20	0.093	0.030
108-90-7	Chlorobenzene	ND	0.20	ND	0.043
100-41-4	Ethylbenzene	ND	0.20	ND	0.046
1330-20-7	m- & p-Xylenes	0.75	0.20	0.17	0.046
75-25-2	Bromoform	ND	0.20	ND	0.019
100-42-5	Styrene	ND	0.20	ND	0.047
95-47-6	o-Xylene	0.52	0.20	0.12	0.046
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ND	0.029
541-73-1	1,3-Dichlorobenzene	ND	0.20	ND	0.033
106-46-7	1,4-Dichlorobenzene	ND	0.20	ND	0.033
95-50-1	1,2-Dichlorobenzene	ND	0.20	ND	0.033

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:__

KR.

Date:

Page No.:

03340VOA.CY1 - 8

2665 Park Center Drive, Suite D. Simi Valley, California 93065 • Phone (805) 526-7161• Fax (805) 526-7270

Air Quality Laboratory

Performance Analytical Inc.

A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

Erler & Kalinowski, Inc.

Client Sample ID :

SVE-D1

PAI Sample ID:

P2003340-005DUP

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

5.00 ml(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	0.20	ND	0.10
75-01-4	Vinyl Chloride	ND	0.20	ND	0.078
74-83-9	Bromomethane	ND	0.20	ND	0.052
75-00-3	Chloroethane	ND	0.20	ND	0.076
67-64-1	Acetone	ND	0.20	ND	0.084
75-69-4	Trichlorofluoromethane	ND	0.20	ND	0.036
75-35-4	1,1-Dichloroethene	ND	0.20	ND	0.050
75-09-2	Methylene chloride	ND	0.20	ND	0.058
76-13-1	Trichlorotrifluoroethane	ND	0.20	ND	0.026
75-15-0	Carbon Disulfide	ND	0.20	ND	0.064
156-60-5	trans-1,2-Dichloroethene	ND	0.20	ND	0.050
75-34-3	1,1-Dichloroethane	ND	0.20	ND	0.049
1634-04-4	Methyl tert-Butyl Ether	ND	0.20	ND	0.055
108-05-4	Vinyl Acetate	ND	0.20	ND	0.057
78-93-3	2-Butanone	ND	0.20	ND	0.068
156-59-2	cis-1,2-Dichloroethene	ND	0.20	ND	0.050
67-66-3	Chloroform	ND	0.20	ND	0.041
107-06-2	1,2-Dichloroethane	ND	0.20	ND	0.049
71-55-6	1,1,1-Trichloroethane	ND	0.20	ND	0.037
71-43-2	Benzene	8.7	0.20	2.7	0.063
56-23-5	Carbon Tetrachloride	ND	0.20	ND	0.032
78-87-5	1,2-Dichloropropane	ND	0.20	ND	0.043

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Date: 12126100 Verified By:

03340VOA.CYI - SDUP

Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

SVE-D1

PAI Sample ID:

P2003340-005DUP

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

5.00 ml(s)

D.F. = 1.00

	COLOURD	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	, ,	1 1		
		mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	0.20	· ND	0.030
79-01-6	Trichloroethene	15	0.20	2.9	0.037
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ND	0.044
108-10-1	4-Methyl-2-pentanone	ND	0.20	ND	0.049
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ND	0.044
79-00-5	1,1,2-Trichloroethane	ND	0.20	ND	0.037
108-88-3	Toluene	0.73	0.20	0.19	0.053
591-78-6	2-Hexanone	ND	0.20	ND	0.049
124-48-1	Dibromochloromethane	ND	0.20	ND	0.023
106-93-4	1,2-Dibromoethane	ND	0.20	ND	0.026
127-18-4	Tetrachloroethene	0.70	0.20	0.10	0.030
108-90-7	Chlorobenzene	ND	0.20	ND	0.043
100-41-4	Ethylbenzene	ND	0.20	ND	0.046
1330-20-7	m- & p-Xylenes	0.91	0.20	0.21	0.046
75-25-2	Bromoform	ND	0.20	ND	0.019
100-42-5	Styrene	ND	0.20	ND	0.047
95-47-6	o-Xylene	0.62	0.20	0.14	0.046
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ND	0.029
541-73-1	1,3-Dichlorobenzene	ND	0.20	ND	0.033
106-46-7	1,4-Dichlorobenzene	ND	0.20	ND	0.033
95-50-1	1,2-Dichlorobenzene	ND	0.20	ND	0.033

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

12/26/00 KR Date: Verified By:



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

VMP-D1

PAI Sample ID : P2003340-006

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Volume(s) Analyzed: 10.00 ml(s)

D.F. = 1.00

	COL MOUNTS	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	mg/m³	mg/m³	ppm	ppm
74.07.3	Chloromethane	ND	0.10	ND	0.048
74-87-3		ND	0.10	ND	0.039
75-01-4	Vinyl Chloride	ND ND	0.10	ND	0.026
74-83-9	Bromomethane				0.028
75-00-3	Chloroethane	ND	0.10	ND	
67-64-1	Acetone	ND ND	0.10	ND	0.042
75-69-4	Trichlorofluoromethane	ND	0.10	ND	0.018
75-35-4	1,1-Dichloroethene	ND	0.10	ND	0.025
75-09-2	Methylene chloride	ND	0.10	ND	0.029
76-13-1	Trichlorotrifluoroethane	ND	0.10	ND	0.013
75-15-0	Carbon Disulfide	ND	0.10	ND	0.032
156-60-5	trans-1,2-Dichloroethene	ND	0.10	ND	0.025
75-34-3	1,1-Dichloroethane	ND	0.10	ND	0.025
1634-04-4	Methyl tert-Butyl Ether	ND	0.10	ND	0.028
108-05-4	Vinyl Acetate	ND	0.10	ND	0.028
78-93-3	2-Butanone	ND	0.10	ND	0.034
156-59-2	cis-1,2-Dichloroethene	0.086 TR	0.10	0.022 TR	0.025
67-66-3	Chloroform	ND	0.10	ND	0.020
107-06-2	1,2-Dichloroethane	ND	0.10	ND	0.025
71-55-6	1,1,1-Trichloroethane	ND	0.10	ND	0.018
71-43-2	Benzene	ND	0.10	ND	0.031
56-23-5	Carbon Tetrachloride	ND	0.10	ND	0.016
78-87-5	1,2-Dichloropropane	ND	0.10	ND	0.022

TR = Detected Below Indicated Reporting Limit

Verified By: KR Date: 12/26/100	Verified By:	KR	Date:	12/26/00
---------------------------------	--------------	----	-------	----------



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client

Erler & Kalinowski, Inc.

Client Sample ID:

VMP-D1

PAI Sample ID:

P2003340-006

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

10.00 ml(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING LIMIT
CAS#	COMPOUND		LIMIT		
		mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	0.10	ND	0.015
79-01-6	Trichloroethene	5.1	0.10	0.95	0.019
10061-01-5	cis-1,3-Dichloropropene	ND	0.10	ND	0.022
108-10-1	4-Methyl-2-pentanone	ND	0.10	ND	0.024
10061-02-6	trans-1,3-Dichloropropene	ND	0.10	ND	0.022
79-00-5	1,1,2-Trichloroethane	ND	0.10	ND	0.018
108-88-3	Toluene	0.17	0.10	0.046	0.027
591-78-6	2-Hexanone	ND	0.10	ND	0.024
124-48-1	Dibromochloromethane	ND	0.10	ND	0.012
106-93-4	1,2-Dibromoethane	ND	0.10	ND	0.013
127-18-4	Tetrachloroethene	1.7	0.10	0.25	0.015
108-90-7	Chlorobenzene	ND	0.10	ND	0.022
100-41-4	Ethylbenzene	ND	0.10	ND	0.023
1330-20-7	m- & p-Xylenes	ND	0.10	ND	0.023
75-25-2	Bromoform	ND	0.10	ND	0.010
100-42-5	Styrene	ND	0.10	ND	0.023
95-47-6	o-Xylene	ND	0.10	ND	0.023
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.10	ND	0.015
541-73-1	1,3-Dichlorobenzene	ND	0.10	ND	0.017
106-46-7	1,4-Dichlorobenzene	ND	0.10	ND	0.017
95-50-1	1,2-Dichlorobenzene	ND	0.10	ND	0.017

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Date: 12 26 100 Verified By: KR Page No.:

03340VOA.CY1 - 6

2665 Park Center Drive, Suite D, Simi Valley, California 93065 • Phone (805) 526-7161 • Fax (805) 526-7270



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

VMP-D2

PAI Sample ID:

P2003340-007

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Date Analyzed: 12/16/00

Analyst: Cindy Yoon/Wade Henton

Matrix: Tedlar Bag

Volume(s) Analyzed: 2.50 ml(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING LIMIT
CAS#	COMPOUND	/3	LIMIT		_
		mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	0.40	ND	0.19
75-01-4	Vinyl Chloride	ND	0.40	ND	0.16
74-83-9	Bromomethane	ND	0.40	ND	0.10
75-00-3	Chloroethane	ND	0.40	ND	0.15
67-64-1	Acetone	ND	0.40	ND	0.17
75-69-4	Trichlorofluoromethane	ND	0.40	ND	0.071
75-35-4	1,1-Dichloroethene	1.8	0.40	0.45	0.10
75-09-2	Methylene chloride	ND	0.40	ND	0.12
76-13-1	Trichlorotrifluoroethane	ND	0.40	ND	0.052
75-15-0	Carbon Disulfide	ND	0.40	ND_	0.13
156-60-5	trans-1,2-Dichloroethene	ND	0.40	ND	0.10
75-34-3	1,1-Dichloroethane	0.23 TR	0.40	0.056 TR	0.10
1634-04-4	Methyl tert-Butyl Ether	ND	0.40	ND	0.11
108-05-4	Vinyl Acetate	ND	0.40	ND	0.11
78-93-3	2-Butanone	ND	0.40	ND	0.14
156-59-2	cis-1,2-Dichloroethene	ND	0.40	ND	0.10
67-66-3	Chloroform	ND	0.40	ND	0.082
107-06-2	1,2-Dichloroethane	ND	0.40	ND	0.10
71-55-6	1,1,1-Trichloroethane	ND	0.40	ND	0.073
71-43-2	Benzene	32	0.40	9.9	0.13
56-23-5	Carbon Tetrachloride	ND	0.40	ND	0.064
78-87-5	1,2-Dichloropropane	ND	0.40	ND	0.087

TR = Detected Below Indicated Reporting Limit

Verified By:	KR	Date:	12/26/00
· · · · · · · · · · · · · · · · · · ·			Doma N



PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : VMP-D2
PAI Sample ID : P2003340-007

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 12/14/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 12/14/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/16/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

2.50 ml(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	mg/m³	mg/m³	ppm	ppm
					<u> </u>
75-27-4	Bromodichloromethane	ND	0.40	ND	0.060
79-01-6	Trichloroethene	7.0	0.40	1.3	0.074
10061-01-5	cis-1,3-Dichloropropene	ND	0.40	ND	0.088
108-10-1	4-Methyl-2-pentanone	ND	0.40	ND	0.10
10061-02-6	trans-1,3-Dichloropropene	ND	0.40	ND	0.088
79-00-5	1,1,2-Trichloroethane	ND	0.40	ND	0.073
108-88-3	Toluene	4.3	0.40	1.2	0.11
591-78-6	2-Hexanone	ND	0.40	ND	0.10
124-48-1	Dibromochloromethane	ND	0.40	ND	0.047
106-93-4	1,2-Dibromoethane	ND	0.40	ND	0.052
127-18-4	Tetrachloroethene	24	0.40	3.6	0.059
108-90-7	Chlorobenzene	ND	0.40	ND	0.087
100-41-4	Ethylbenzene	2.0	0.40	0.46	0.092
1330-20-7	m- & p-Xylenes	5.8	0.40	1.3	0.092
75-25-2	Bromoform	ND	0.40	ND	0.039
100-42-5	Styrene	ND	0.40	ND	0.094
95-47-6	o-Xylene	3.2	0.40	0.74	0.092
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.40	ND	0.058
541-73-1	1,3-Dichlorobenzene	ND	0.40	ND	0.067
106-46-7	1,4-Dichlorobenzene	0.47	0.40	0.079	0.067
95-50-1	1,2-Dichlorobenzene	0.80	0.40	0.13	0.067

TR = Detected Below Indicated Reporting Limit

Verified By:	KR	Date:	le)	26/00
				Been Ma



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

Method Blank

PAI Sample ID:

P001214-MB

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

N/A

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received:

N/A

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/14/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

C.A.G.#	CONTROLINID	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CAS#	COMPOUND	μg/m³	μg/m³	ppb	ppb
					
74-87-3	Chloromethane	ND	1.0	ND	0.48
75-01-4	Vinyl Chloride	ND_	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND_	1.0	ND	0.38
67-64-1	Acetone	ND	1.0	ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	ND	1.0	ND_	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Date: 12 26 100 Verified By:____ ke



PAGE 2 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

Method Blank

PAI Sample ID:

P001214-MB

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

N/A

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received:

N/A

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/14/00

1.00 Liter(s)

Matrix: Tedlar Bag

Volume(s) Analyzed:

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING LIMIT
CAS#	COMPOUND		LIMIT	1.	
		μg/m³	μg/m³	ppb	ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	ND	1.0	ND	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
1330-20-7	m- & p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Date: 12/26/00 KR Verified By:

03340VOA CYI - MBlank

2665 Park Center Drive, Suite D. Sam Vatley, California 93065 • Phone (805) 526-7161 • Fax (805) 526-7270



Air Quality Laboratory

A Division of Columbia Analytical Services, Inc

An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID: Method Blank PAI Sample ID: P001215-MB

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

N/A

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: N/A

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING LIMIT
CAS#	COMPOUND	1 3	LIMIT		i i
		μg/m³	μg/m³	ppb	ppb
74-87-3	Chloromethane	ND	1.0	ND_	0.48
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND	1.0	ND	0.38
67-64-1	Acetone	ND	1.0	ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	ND	1.0	ND	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

Verified By:	KR	Date:	la l	26/00
•				Dogo Mo



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 2 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

Method Blank

PAI Sample ID:

P001215-MB

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

N/A

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received:

N/A Date Analyzed: 12/15/00

Matrix: Tedlar Bag

Analyst: Cindy Yoon/Wade Henton

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppb	ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	ND	1.0	ND	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
1330-20-7	m- & p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:___ KR



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

: Erler & Kalinowski, Inc.

Client Sample ID:

Method Blank

PAI Sample ID:

P001216-MB

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

N/A

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received:

N/A

Date Analyzed: 12/16/00

Analyst: Cindy Yoon/Wade Henton

1.00 Liter(s)

Matrix: Tedlar Bag

Volume(s) Analyzed:

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		μg/m³	μg/m³	ppb	ppb
74-87-3	Chloromethane	ND	1.0	ND	0.48
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND	1.0	ND	0.38
67-64-1	Acetone	ND	1.0	ND ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	ND	1.0	ND	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ŊD	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

12/26/00 KR Date: Verified By:

03340VOA CYI - MBlank (3)



PAGE 2 OF 2

: Erler & Kalinowski, Inc. Client

Method Blank Client Sample ID: P001216-MB PAI Sample ID:

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

N/A

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received:

N/A

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 12/16/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CARS #	00112	μg/m³	μg/m³	ppb	ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	ND	1.0	ND	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
1330-20-7	m- & p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:___ KR Date:

P2003340

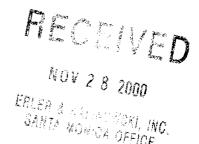
CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Efler & Ka	llnowski, inc.			·,	Analytical Laboratory: PERFORMAN	<u>CE</u>
Project Nu	ımber: 961025.	03		<u>.</u>	Date Sampled: 12/14/00	
Project Na	me: WEBB			_	Sampled By: BJA	
Source of	Samples: SVE S	YSTEM			Report Results To: BRIAN AVCHA	20
Locations	5030 FIRESTO	ME BLUD	, SOUTH GATE		Phone Number: (310) 314-8055	
Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	Analyses Requested (EPA Hethod Number)	Results Required By (Date/Time)
-/	BLOWER INFLUENT	VAPOR	5-L TEDLAR	11:23	TO-14	BY 12/28/00
-2	SVE-1		1-L TEOLAR	11:49		
-3	SVE-Z		1-L TEDLAR	11:31		:
-4	5VE-3		5-L TEDLAR	10:59		
-5	SVE-DI		5. L TEDLAR	11:39		
-6	VMP-DI		5-L TEDLAR	11:05		
-7	VMP-DZ		5-L TEDLAR	11:15		
-8	SVE-DI-DUP		1-L TEDLAR	11:41	↓	1
7-9	EQUIP BLANK				,	
° 10	EQUIP SERVE 2	·				
Special I	nstructions					

Relinquished By:			Received By:		
Name / Signature / Affillation	Date	Time	Name / Signature / Aff	iliation	
BANAN AUCHARD/ 2. C. JEK	1 12/14/00	1:30	Cotto		
1 an Sa	12/14/00	4:05 Pm	V. Robresses	12/14/00	4:05 pm.
	·		100		



Air Quality Laboratory
A Division of Columbia Analytical Services. Inc.
An Employee Owned Company



LABORATORY REPORT

Client:

ERLER & KALINOWSKI, INC.

Date of Report:

11/13/00

Address:

3250 Ocean Park Blvd., Suite 385

Date Received:

10/26/00

Santa Monica, CA 90405

PAI Project No:

P2002868

Contact:

Mr. Brian Auchard

Purchase Order:

Verbal

Client Project ID: WEBB #961025.03

Three (3) Tedlar Bag Samples labeled:

"Blower Influent"

"SVE-1"

"SVE-D1"

The samples were received at the laboratory under chain of custody on October 26, 2000. The samples were received intact. The dates of analyses are indicated on the attached data sheets.

Volatile Organic Compound Analysis

The samples were analyzed by combined gas chromatography/mass spectrometry (GC/MS) for volatile organic compounds. The analyses were performed according to the methodology outlined in EPA Method TO-14A. The method was modified for using Tedlar bags. The analyses were performed by gas chromatography/mass spectrometry, utilizing a direct cryogenic trapping technique. The analytical system used was comprised of a Hewlett Packard Model 5973 GC/MS/DS interfaced to a Tekmar AutoCan Elite whole air inlet system/cryogenic concentrator. A 100% Dimethylpolysiloxane capillary column (RT_x-1, Restek Corporation, Bellefonte, PA) was used to achieve chromatographic separation.

The results of analyses are given on the attached data summary sheets.

Reviewed and Approved:

Analytical Chemist

Reviewed and Approved:

Chris Parnell Senior Chemist



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

Blower Influent

PAI Sample ID:

P2002868-001

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 10/26/00

Instrument: HP5973/Tekmar AUTOCan Elite

Analyst: Cindy Yoon/Wade Henton

Date Received: 10/26/00 Date Analyzed: 10/26/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

5.00 ml(s)

D.F. = 1.00

		RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT		LIMIT
		mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	0.20	ND	0.10
75-01-4	Vinyl Chloride	ND	0.20	ND	0.08
74-83-9	Bromomethane	ND	0.20	ND	0.05
75-00-3	Chloroethane	ND	0.20	ND	0.08
67-64-1	Acetone	ND	0.20	ND	0.08
75-69-4	Trichlorofluoromethane	ND	0.20	ND	0.04
75-35-4	1,1-Dichloroethene	0.40	0.20	0.10	0.05
75-09-2	Methylene chloride	ND	0.20	ND	0.06
76-13-1	Trichlorotrifluoroethane	ND	0.20	ND	0.03
75-15-0	Carbon Disulfide	ND	0.20	ND	0.06
156-60-5	trans-1,2-Dichloroethene	ND	0.20	ND	0.05
75-34-3	1,1-Dichloroethane	ND	0.20	ND	0.05
1634-04-4	Methyl tert-Butyl Ether	ND	0.20	ND	0.06
108-05-4	Vinyl Acetate	ND	0.20	ND	0.06
78-93-3	2-Butanone	ND	0.20	ND	0.07
156-59-2	cis-1,2-Dichloroethene	ND	0.20	ND	0.05
67-66-3	Chloroform	ND	0.20	ND	0.04
107-06-2	1,2-Dichloroethane	ND	0.20	ND	0.05
71-55-6	1,1,1-Trichloroethane	ND	0.20	ND	0.04
71-43-2	Benzene	12	0.20	3.8	0.06
56-23-5	Carbon Tetrachloride	ND	0.20	ND	0.03
78-87-5	1,2-Dichloropropane	ND	0.20	ND	0.04

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:	KR	Date:	11/9/00
			Page No

02868VOA.CY1 - Sample



PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : Blower Influent PAI Sample ID : P2002868-001

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 10/26/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 10/26/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 10/26/00

Matrix : Tedlar Bag

Volume(s) Analyzed :

5.00 ml(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
		mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	0.20	ND	0.03
79-01 - 6	Trichloroethene	12	0.20	2.3	0.04
10061-01-5	cis-1,3-Dichloropropene	ND	0.20	ND	0.04
108-10-1	4-Methyl-2-pentanone	ND	0.20	ND	0.05
10061-02-6	trans-1,3-Dichloropropene	ND	0.20	ND	0.04
79-00-5	1,1,2-Trichloroethane	ND	0.20	ND	0.04
108-88-3	Toluene	1.4	0.20	0.36	0.05
591-78-6	2-Hexanone	ND	0.20	ND	0.05
124-48-1	Dibromochloromethane	ND	0.20	ND	0.02
106-93-4	1,2-Dibromoethane	ND	0.20	ND	0.03
127-18-4	Tetrachloroethene	1.6	0.20	0.23	0.03
108-90-7	Chlorobenzene	ND	0.20	ND	0.04
100-41-4	Ethylbenzene	0.59	0.20	0.14	0.05
1330-20-7	m- & p-Xylenes	1.9	0.20	0.43	0.05
75-25-2	Bromoform	ND	0.20	ND	0.02
100-42-5	Styrene	ND	0.20	ND	0.05
95-47-6	o-Xylene	0.71	0.20	0.16	0.05
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.20	ND	0.03
541-73-1	1,3-Dichlorobenzene	ND	0.20	ND	0.03
106-46-7	1,4-Dichlorobenzene	ND	0.20	ND	0.03
95-50-1	1,2-Dichlorobenzene	ND	0.20	ND	0.03

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By: YR Date: 11 9 00
Page No.:

02868VOA.CY1 - Sample



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

SVE-1

PAI Sample ID:

P2002868-002

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 10/26/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 10/26/00

Date Analyzed: 10/26/00

Matrix: Tedlar Bag

Analyst: Cindy Yoon/Wade Henton

Volume(s) Analyzed:

0.10 ml(s)

D.F. = 1.00

a.a."	GOT WOTH ID	RESULT	REPORTING	RESULT	REPORTING LIMIT
CAS#	COMPOUND		LIMIT mg/m³		
		mg/m³	mg/m³	ppm	ppm
74-87-3	Chloromethane	ND	10	ND	4.8
75-01-4	Vinyl Chloride	ND	10	ND	3.9
74-83-9	Bromomethane	ND ND	10	ND	2.6
75-00-3	Chloroethane	ND	10	ND	3.8
67-64-1	Acetone	ND	10	ND	4.2
75-69-4	Trichlorofluoromethane	ND	10	ND	1.8
75-35-4	1,1-Dichloroethene	ND	10	ND	2.5
75-09-2	Methylene chloride	ND	10	ND	2.9
76-13-1	Trichlorotrifluoroethane	ND	10	ND	1.3
75-15-0	Carbon Disulfide	ND	10	ND	3.2
156-60-5	trans-1,2-Dichloroethene	ND	10	ND	2.5
75-34-3	1,1-Dichloroethane	ND	10	ND	2.5
1634-04-4	Methyl tert-Butyl Ether	ND	10	ND	2.8
108-05-4	Vinyl Acetate	ND	10	ND	2.8
78-93-3	2-Butanone	ND	10	ND	3:4
156-59-2	cis-1,2-Dichloroethene	ND	10	ND	2.5
67-66-3	Chloroform	ND	10	ND	2.0
107-06-2	1,2-Dichloroethane	ND	10	ND	2.5
71-55-6	1,1,1-Trichloroethane	ND	10	ND	1.8
71-43-2	Benzene	ND	10	ND	3.1
56-23-5	Carbon Tetrachloride	ND	10	ND	1.6
78-87-5	1,2-Dichloropropane	ND	10	ND	2.2

TR = Detected Below Indicated Reporting Limit

Verified By:	KR	Date:	11/9/00	
•			P ₂	ee No



PAGE 2 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

SVE-1

PAI Sample ID:

P2002868-002

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 10/26/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 10/26/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 10/26/00

0.10 ml(s)

Matrix: Tedlar Bag

Volume(s) Analyzed:

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
		mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	10	ND	1.5
79-01-6	Trichloroethene	750	10	140	1.9
10061-01-5	cis-1,3-Dichloropropene	ND	10	ND	2.2
108-10-1	4-Methyl-2-pentanone	ND	10	ND	2.4
10061-02-6	trans-1,3-Dichloropropene	ND	10	ND	2.2
79-00-5	1,1,2-Trichloroethane	ND	10	ND	1.8
108-88-3	Toluene	ND	10	ND	2.7
591-78-6	2-Hexanone	ND	10	ND	2.4
124-48-1	Dibromochloromethane	ND	10	ND	1.2
106-93-4	1,2-Dibromoethane	ND	10	ND	1.3
127-18-4	Tetrachloroethene	27	10	3.9	1.5
108-90-7	Chlorobenzene	ND	10	ND	2.2
100-41-4	Ethylbenzene	ND	10	ND	2.3
1330-20-7	m- & p-Xylenes	ND	10	ND	2.3
75-25-2	Bromoform	ND	10	ND	0.97
100-42-5	Styrene	ND	10	ND	2.3
95-47-6	o-Xylene	ND	10	ND	2.3
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	ND	1.5
541-73-1	1,3-Dichlorobenzene	ND	10	ND	1.7
106-46-7	1,4-Dichlorobenzene	ND	10	ND	1.7
95-50-1	1,2-Dichlorobenzene	ND	10	ND	1.7

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Date: 11 | a | co Verified By:

02868VOA.CY1 - Sample (2)

2665 Park Center Drive, Suite D. Simi Valley, California 93065 • Phone (805) 526-7161 • Fax (805) 526-7270



Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

SVE-D1

PAI Sample ID:

P2002868-003

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 10/26/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 10/26/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 10/26/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

2.50 ml(s)

D.F. = 1.00

G. 6."	COLONATO	RESULT	REPORTING	RESULT	REPORTING LIMIT
CAS#	COMPOUND	mg/m³	LIMIT mg/m³	l ppm	ppm
74-87-3	Chloromethane	ND	0.40	ND	0.19
11			0.40		
75-01-4	Vinyl Chloride	ND	 	ND	0.16
74-83-9	Bromomethane	ND	0.40	ND	0.10
75-00-3	Chloroethane	ND	0.40	ND	0.15
67-64-1	Acetone	ND	0.40	ND	0.17
75-69-4	Trichlorofluoromethane	ND	0.40	ND	0.07
75-35-4	1,1-Dichloroethene	ND	0.40	ND	0.10
75-09-2	Methylene chloride	ND	0.40	ND	0.12
76-13-1	Trichlorotrifluoroethane	ND	0.40	ND	0.05
75-15-0	Carbon Disulfide	ND	0.40	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	0.40	ND	0.10
75-34-3	1,1-Dichloroethane	ND	0.40	ND	0.10
1634-04-4	Methyl tert-Butyl Ether	ND	0.40	ND	0.11
108-05-4	Vinyl Acetate	ND	0.40	ND	0.11
78-93-3	2-Butanone	ND	0.40	ND	0.14
156-59-2	cis-1,2-Dichloroethene	ND	0.40	ND	0.10
67-66-3	Chloroform	ND	0.40	ND	0.08
107-06-2	1,2-Dichloroethane	ND	0.40	ND	0.10
71-55-6	1,1,1-Trichloroethane	ND	0.40	ND	0.07
71-43-2	Benzene	37	0.40	11	0.13
56-23-5	Carbon Tetrachloride	ND	0.40	ND_	0.06
78-87-5	1,2-Dichloropropane	ND	0.40	ND	0.09

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:	KR	Date:	11/9/00	
			Page No.	.:

02868VOA.CY1 - Sample (3)

2665 Park Center Drive, Suite D. Simi Valley, California 93065 • Phone (805) 526-7161 • Fax (805) 526-7270



PAGE 2 OF 2

Client: Erler & Kalinowski, Inc.

Client Sample ID : SVE-D1
PAI Sample ID : P2002868-003

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled: 10/26/00

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received: 10/26/00

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 10/26/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

2.50 ml(s)

D.F. = 1.00

G. G. W	COLOUR	RESULT	REPORTING	RESULT	REPORTING LIMIT
CAS#	COMPOUND	1	LÍMIT		
		mg/m³	mg/m³	ppm	ppm
75-27-4	Bromodichloromethane	ND	0.40	ND	0.06
79-01-6	Trichloroethene	13	0.40	2.4	0.07
10061-01-5	cis-1,3-Dichloropropene	ND	0.40	ND	0.09
108-10-1	4-Methyl-2-pentanone	ND	0.40	ND	0.10
10061-02-6	trans-1,3-Dichloropropene	ND	0.40	ND	0.09
79-00-5	1,1,2-Trichloroethane	ND	0.40	ND	0.07
108-88-3	Toluene	3.9	0.40	1.0	0.11
591-78-6	2-Hexanone	ND	0.40	ND	0.10
124-48-1	Dibromochloromethane	ND	0.40	ND	0.05
106-93-4	1,2-Dibromoethane	ND	0.40	ND	0.05
127-18-4	Tetrachloroethene	0.32 TR	0.40	0.05 TR	0.06
108-90-7	Chlorobenzene	ND	0.40	ND	0.09
100-41-4	Ethylbenzene	1.3	0.40	0.31	0.09
1330-20-7	m- & p-Xylenes	5.0	0.40	1.1	0.09
75-25-2	Bromoform	ND	0.40	ND	0.04
100-42-5	Styrene	ND	0.40	ND	0.09
95-47-6	o-Xylene	1.9	0.40	0.44	0.09
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.40	ND	0.06
541-73-1	1,3-Dichlorobenzene	ND	0.40	ND	0.07
106-46-7	1,4-Dichlorobenzene	ND	0.40	ND	0.07
95-50-1	1,2-Dichlorobenzene	ND	0.40	ND	0.07

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified By:	Ke	Date:	11/9	∞	
				Page	e No.:

02868VOA.CY1 - Sample (3)

2665 Park Center Drive, Suite D. Simi Valley, California 93065 • Phone (805) 526-7161• Fax (805) 526-7270

Air Quality Laboratory A Division of Columbia Analytical Services, Inc. An Employee Owned Company

RESULTS OF ANALYSIS

PAGE 1 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID: Method Blank

PAI Sample ID: P001026-MB

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

N/A

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received:

N/A

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 10/26/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

CAS#	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
CA3#	COMICOND	μg/m³	μg/m³	ppb	ppb
74-87-3	Chloromethane	ND	1.0	ND	0.48
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
74-83-9	Bromomethane	ND	1.0	ND	0.26
75-00-3	Chloroethane	ND	1.0	ND	0.38
67-64-1	Acetone	ND	1.0	ND	0.42
75-69-4	Trichlorofluoromethane	ND	1.0	ND	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	ND	1.0	ND	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	ND	1.0	ND	0.34
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
67-66-3	Chloroform	ND	1.0	ND	0.20
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.18
71-43-2	Benzene	ND	1.0	ND	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

Verified By:	KR	Date:	11/9/00
			Dana Mari



PAGE 2 OF 2

Client

: Erler & Kalinowski, Inc.

Client Sample ID:

Method Blank

PAI Sample ID: P001026-MB

Test Code: GC/MS Mod. EPA TO-14A

Date Sampled:

N/A

Instrument: HP5973/Tekmar AUTOCan Elite

Date Received:

N/A

Analyst: Cindy Yoon/Wade Henton

Date Analyzed: 10/26/00

Matrix: Tedlar Bag

Volume(s) Analyzed:

1.00 Liter(s)

D.F. = 1.00

	GOT WOLLD AD	RESULT	REPORTING	RESULT	REPORTING
CAS#	COMPOUND		LIMIT] .	LIMIT
		μg/m³	μg/m³	ppb	ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	ND	1.0	ND	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.18
108-88-3	Toluene	ND	1.0	ND	0.27
591-78-6	2-Hexanone	ND	1.0	ND	0.24
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	ND	1.0	ND	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	ND	1.0	ND	0.23
1330-20-7	m- & p-Xylenes	ND	1.0	ND	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.23
95-47-6	o-Xylene	ND	1.0	ND	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

Verified By:	KR	Date:	П	9	0	

P2002868

CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST

Erler & Kallnowski, Inc.			Analytical Laboratory: PERFORMANCE					
Project No	umber: 96/025,0	3				ed: 10/26/00		
Project Name: WEBB				Sampled By: BA				
Source of	urce of Samples: SVE SYSTEM Report			Report Res	port Results To: BRIAN AUCHARD			
Locations	5030 FIRESTON	ve BLVD,	SOUTHS GATE		Phone Numb	er: (310) 314-8855		
Lab Sample I D	Field Sample I D	Sample Type	Number and Type of Containers	Time Collected	ME P	Analyses Requested (EPA Hethod Number)	Results Required By (Date/Time)	
	BLOWER INFLUENT	VAPOR	1 × 5-L TEDLAR	8:50	TO-14	·	2 WEEKS	
	SVE-1			8:55			1	
	SVE-DI	•		8:45	+		J:	
			. ,					
							·	
					-	· · · · · · · · · · · · · · · · · · ·		
Special I	netructions						1	